

BLACKFOOT RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Blackfoot River begins at the junction of Beartrap and Anaconda Creeks, located near the Continental Divide between Rogers Pass and Flesher Pass. From its headwaters, the river flows westward for 132 miles through Lewis and Clark, Powell, and Missoula Counties, draining a 2,290 square mile basin to Bonner, where it joins the Clark Fork River. The Blackfoot watershed includes 9,000-foot peaks in the headwaters, flows through heavily forested slopes, montane foothills before entering rangelands and prairie pothole topography on the valley floor. Major tributary drainages include the North Fork of the Blackfoot River and Clearwater River. The North Fork begins in the Scapegoat Wilderness, flowing much of its length through a glaciated mountain valley and a steep confined canyon within the USFS boundary. As it enters the floor of the Blackfoot valley, the North Fork flows through a more agricultural setting, bordered by private land, before entering the Blackfoot River at river-mile 54. The Clearwater watershed is comprised of a peripheral network of forested freestone, coldwater streams which lie primarily on public lands and enter an interconnected chain of glacial lakes on the valley floor. Land ownership is mixed along the valley floor, with private lands concentrated near the town of Seeley Lake.

There are 59 natural lakes totaling 5,720 acres and one large reservoir of 350 acres within the Blackfoot Drainage. Most natural lakes are mid- and high elevation “mountain” lakes that lie in remnant glacial cirques and troughs within public land holdings in backcountry settings. However, many of the larger natural lakes make up the Clearwater River chain and glacial potholes in the Ovando area. Large natural lakes include Salmon, Placid, Seeley, Alva, Inez, Rainy, Browns and Upsata Lakes. All of the larger valley floor lakes receive considerable angling pressure as well as other recreational activities. The only major reservoir is Nevada Reservoir near Helmville, which is managed primarily for irrigation purposes. Nevada Reservoir experiences considerable drawdown during dry years.

FISHERIES MANAGEMENT

Located in the west-central part of the state, the Blackfoot River is one of twelve renowned “Blue Ribbon” rivers in Montana with an instream flow (Murphy) water right and is one of Montana’s most popular rivers for recreation. The river’s outstanding natural resources and diversity of recreational opportunities, combined with its proximity to Missoula, contribute to its popularity. The Clearwater River watershed is the largest tributary to the Blackfoot River in terms of drainage area and is often treated as a separate system with its own unique natural resource values.

The Blackfoot River is managed as a wild trout fishery, emphasizing natural reproduction of free-ranging and naturalized nonnative trout. The basin is also a focus for native trout recovery efforts. The Blackfoot River basin is home to eleven native fish species including bull trout, westslope cutthroat trout, mountain whitefish, pygmy whitefish, peamouth, northern pikeminnow, longnose dace, redbreast shiner, longnose and largescale suckers, and two species of sculpin. Fourteen nonnative fish species inhabit the Blackfoot Basin including brown trout,

brook trout, rainbow trout, Yellowstone cutthroat trout, Arctic grayling, kokanee salmon, northern pike, fathead minnow, brook stickleback, central mudminnow, pumpkinseed, largemouth bass, yellow perch and white sucker. Dominant fish species and species composition vary greatly among headwater reaches, lakes and mainstem river sections. During the last 20 years westslope cutthroat trout have increased from <3% of the trout community to over one-third of the mainstem river trout community. Much of this increase has occurred since 1990, when basin-wide catch-and-release regulations were instituted and major aquatic restoration activities began. Information is lacking on the abundance and life histories of non-game native fishes. Efforts are needed to describe these and monitor trends.

Bull trout are found throughout the drainage, and particularly within the larger, coldest stream systems. Migratory bull trout move freely throughout the entire Blackfoot mainstem and rely on the larger colder tributaries including the North Fork Blackfoot, Monture and Copper Creeks for reproduction and rearing. Similarly, adfluvial (lake-dwelling) bull trout occupy the chain of lakes in the Clearwater system and spawn in tributaries such as Morrell Creek and East and West forks of the Clearwater River. Juvenile bull trout also occupy many of the smaller, colder tributaries throughout the Blackfoot drainage, where these streams are connected to larger bull trout strongholds. Both westslope cutthroat trout and bull trout have been the focus of basin-wide protection and restoration activities for over 20 years. Protection activities include special fishing regulations (e.g., stream mouth closures, gear restrictions), as well as public land acquisitions and conservation easements in native trout habitat. Restoration projects, such as instream improvements, fish passage enhancements, fish screening, and water leases have been undertaken throughout the basin in order to help recover bull trout, westslope cutthroat trout and other species. This work has occurred on both private and public land.

Angling occurs year-round on the Blackfoot River, but is most popular in the early spring, summer and fall. Opportunities exist for both wade and float angling and while fly-fishing is particularly popular, artificial lures and bait fishing are also common. Angling restrictions and habitat improvement have significantly improved native trout numbers in the Blackfoot basin. Long-term studies show native trout recovery has been most effective in the mid- to upper Blackfoot basin upstream of the Clearwater River. Because of this, habitat improvements in the Blackfoot River drainage below the Clearwater River should emphasize ecosystem function for all salmonids, including bull trout in streams like Gold and Belmont creeks. Native salmonids in the lower Blackfoot basin should be protected, or enhanced where possible.

Natural lakes in the Clearwater Valley offer diverse fishing opportunities and strongholds for native fish. Upper drainage lakes, including Clearwater, Rainy, Alva, Marshall, and Inez, support coldwater fisheries for westslope cutthroat trout, kokanee, and whitefish. Although brown trout, brook trout and small populations of warmwater fish are also present in these waters, management emphasizes native trout and kokanee. Lower drainage lakes in the Clearwater chain (Seeley, Placid and Salmon Lakes) provide mixed fisheries. Although illegally introduced northern pike are abundant in Seeley and Salmon lakes, these lakes still provide viable salmonid fisheries and important habitat for migratory bull trout populations. Placid Lake, the warmest and most productive lake in the area, supports nonnative salmonids, largemouth bass and yellow perch fisheries. Bull trout in Placid Lake are not present or are in extremely low numbers.

Lowland lakes such as Harpers, Upsata, Coopers and Browns Lake also provide valuable recreational fisheries. Harpers and Browns Lakes are stocked annually with rainbow trout and

both support heavily used put-and-grow fisheries. Rainbow trout in Browns Lake exhibit outstanding growth and this lake supports one of the few trophy rainbow trout fisheries in the region. Upstata Lake is prone to periodic fish kills and is managed as a warmwater bass fishery partially supported by the stocking of largemouth bass. Coopers Lake is a low elevation oligotrophic lake managed as a put-and-grow cutthroat trout fishery.

Mountain lakes largely support self-sustaining trout populations or are stocked with westslope cutthroat trout in some instances. An exception is Heart Lake, which is stocked with both Arctic grayling and westslope cutthroat trout. Several lakes in the backcountry support self-sustaining, naturalized rainbow trout and these include Parker, Twin, Otatsy and Camp Lakes. Canyon Lake, located in the upper North Fork drainage, supports genetically pure adfluvial native westslope cutthroat trout. Several high elevation lakes, as well as glacial potholes on the Blackfoot valley floor are managed as fishless and thereby emphasize the conservation of other native species (e.g., amphibians).

HABITAT

The Blackfoot River Basin has a long history of habitat protection, river restoration and riparian habitat conservation emphasizing native fish. These activities occur basin-wide and typically focus on altered tributary streams. To date, riparian habitat improvements have occurred on more than 50 tributaries. Projects typically involve livestock management changes, fish passage enhancement, augmenting instream flows, screening irrigation ditches and planting riparian vegetation. These types of activities usually involve cooperating private landowners, conservation groups (e.g., Trout Unlimited) and natural resource agencies.

The Blackfoot River basin contains about 165 miles of dewatered stream on 46 tributaries, most of which is the result of irrigation. A drought plan was developed for the Blackfoot River beginning in 2000 to help offset low-flow impacts to fisheries. This plan calls for angler restrictions and river closures in the summer when flows drop below 700 cfs at Bonner, which corresponds with FWP's 1973 Murphy Water right. If junior water users have a cooperative and effective water conservation plan, their junior water right is not subject to call.

Recent and ongoing land acquisitions and conservation easements have been completed throughout the Blackfoot drainage. The most recent acquisition and easement actives are part of the "Montana Working Forests Project", which includes large transfers of former Plum Creek Land to conservation-minded private landowners, FWP and other natural resource agencies. Two recent examples include the North Chamberlain Project and the Marshall Creek Wildlife Management Area, both of which are specifically designed to protect both fish and wildlife species. In addition, prior conservation easements have been placed on private lands throughout the Blackfoot valley in areas that support critical bull and westslope cutthroat trout habitat. These easements focus on the Ovando Valley but are expanding into the Nevada, Clearwater and Lincoln valleys as well. As of 2012, over 125,000 acres of private land are protected from development pressure under perpetual conservation easements. Where possible, FWP will continue to promote landscape protections in native fish habitat.

Low flows can limit floating opportunities above the confluence of the mainstem and North Fork during certain times of the year. Below the confluence, opportunities for float recreation are available most of the year during normal flows.

The Montana Department of Environmental Quality classifies the Blackfoot as a B-1 stream, meaning the river should be maintained for activities such as drinking and municipal uses, swimming and recreation, growth and propagation of trout and associated aquatic life, and as an agricultural and industrial water supply.

Water quality in the Blackfoot watershed is generally high with only slight or no impairment. However, lower Nevada Creek (located in the middle basin) and the Mike Horse Mine area (located in the very headwaters of the Blackfoot River) are exceptions. Nevada Creek is prone to dewatering and water quality problems due to intensive agricultural activities. The Mike Horse area is contaminated by elevated metals concentrations due to the release of mine wastes from the adits and tailings and the 1974 failure of the Mike Horse tailing dam, which further contaminated the upper Blackfoot River with toxic waste. Water quality degradation is also a concern in the Clearwater chain-of-lakes area due to human development and intensive land use. Elevated nutrient levels and eutrophication are a concern in Seeley, Salmon and Placid Lakes at the lower end of the system where impacts of human use are magnified.

FISHING ACCESS

There are more than 30 publicly owned or managed access sites along the Blackfoot River and numerous others at lakes and streams across the watershed. Some access sites are located near local communities and, in addition to river or lake access, provide convenient land-based recreation opportunities. Public access sites on lakes are largely managed by either FWP or the USFS, depending on land ownership. Within the Blackfoot River Recreation Corridor (27 miles from Russell Gates FAS to Johnsrud Park FAS), the public is allowed to access the lower Blackfoot River via private land (up to 50 ft above the ordinary high water mark) through a cooperative agreement with private landowners. This access agreement supplements existing public access sites within the corridor. FWP also manages BLM sites along the Blackfoot River through a cooperative management agreement. The FAS program also must consider how location, development and use of access sites affect recreational use on the water and the social experience under guidance from the Blackfoot River Recreation Management Plan of 2010. Another priority is to pursue opportunities for extended float trips using existing access sites for boat camps.

SPECIAL MANAGEMENT ISSUES

Social Conflicts on the Blackfoot River

A recreation management plan was developed for the Blackfoot River in 2010 for the purpose of addressing social conflicts on the river and at access sites. The plan guides management of conflicts between user groups, congestion on the water and at access sites, littering and other resource impacts associated with high concentrations and volume of use, and behavior of users.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR BLACKFOOT RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Blackfoot River and Tributaries (Headwaters Downstream to Confluence with Clearwater River)	90 miles of mainstem and Connected Tributaries	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout. Enhance migratory populations for conservation. Enhance catch-and-release WCT fishery. Consider isolation of WCT populations only if hybridization or competitive displacement clearly threatens the persistence of local populations.
		Rainbow trout, Brown trout	Wild	Liberal regulations	Allow liberal harvest. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
		Other introduced game fish (e.g., Yellow perch, Northern pike, Brook trout)	Wild	General	Manage for liberal harvest and contain distribution where possible.
Critical habitat needs: Clean-up of Mike Horse Mine area in headwaters of the Blackfoot River. Restore habitat to favor native salmonids based on established. native trout priority streams.					
Nevada Reservoir	350 acres	Westslope cutthroat trout	Hatchery	Put- Grow-Take	Manage for high catch rates and quality-sized fish.
		Yellow perch	Wild	General	Liberalize harvest and contain distribution.
Coopers Lake	200 acres	Westslope cutthroat trout	Hatchery	Put- Grow-Take	Manage for high catch rates and quality sized fish.
Browns Lake	530 acres	Rainbow trout	Hatchery	Put- Grow-Take	Manage for trophy rainbow trout and quality harvest opportunities with high catch rates.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
North Fork Blackfoot River, Monture and Copper/Landers Fork Drainages	70 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue closure for intentional angling of bull trout and enhancement of angling opportunity for WCT. Consider reintroductions of native WCT in the streams and lakes in the Wilderness area of the North Fork upstream of the North Fork Falls. Consider converting Yellowstone cutthroat trout to westslope cutthroat trout in Big Horn Lake in the Landers Fork drainage.
		Brown trout	Wild	Liberal Regulations	Maintain liberal harvest opportunity to reduce expansion and impacts on other trout. Consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.
		Rainbow trout	Wild	Quality	Maintain numbers at present levels.
Lake Upsata	91 acres	Largemouth bass	Hatchery	Quality	Provide for a high quality largemouth bass angling though stocking and restrictive regulations.
Clearwater River and Tributaries	50 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and stream-resident populations. Continue protective regulations to prohibit bull trout harvest and limit WCT harvest.
		Brown trout Brook trout			
		Kokanee salmon	Wild	Liberal Regulations	Provide liberal harvest opportunities. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
		Yellow perch, Largemouth bass,	Wild/ Hatchery	General	Manage for quality harvest opportunities with high catch rates; evaluate relative contribution of wild and stocked fish.

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Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Northern pike, Pumpkinseed	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with and predation on trout and salmon.
Habitat needs and activities: continue to manage connectivity to benefit native fishes. Improve quality of tributary habitat.					
Clearwater, Rainy, Alva, Marshall and Inez Lakes	878 acres	Bull trout (N)	Wild	Conservation	Conserve and enhance migratory populations. Continue protective regulations to prohibit angler harvest.
		Westslope cutthroat trout (N)	Wild	Put- Grow-Take	Manage for quality sized fish and high catch rates. Evaluate relative contributions of wild and stocked fish; evaluate performance and feasibility of sterile stocked fish.
		Kokanee salmon	Wild/ Hatchery	Put-Grow-Take	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish.
		Brook trout, Brown trout	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce predation on and competition and hybridization with native trout.
		Yellow perch, Largemouth bass, Pumpkinseed	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with and predation on trout and salmon.
		Northern pike	Wild	Suppression	Emphasize harvest to reduce predation on trout; derbies are required to harvest fish. Explore other harvest means such as angler incentives and commercial methods that would need legislative approval.

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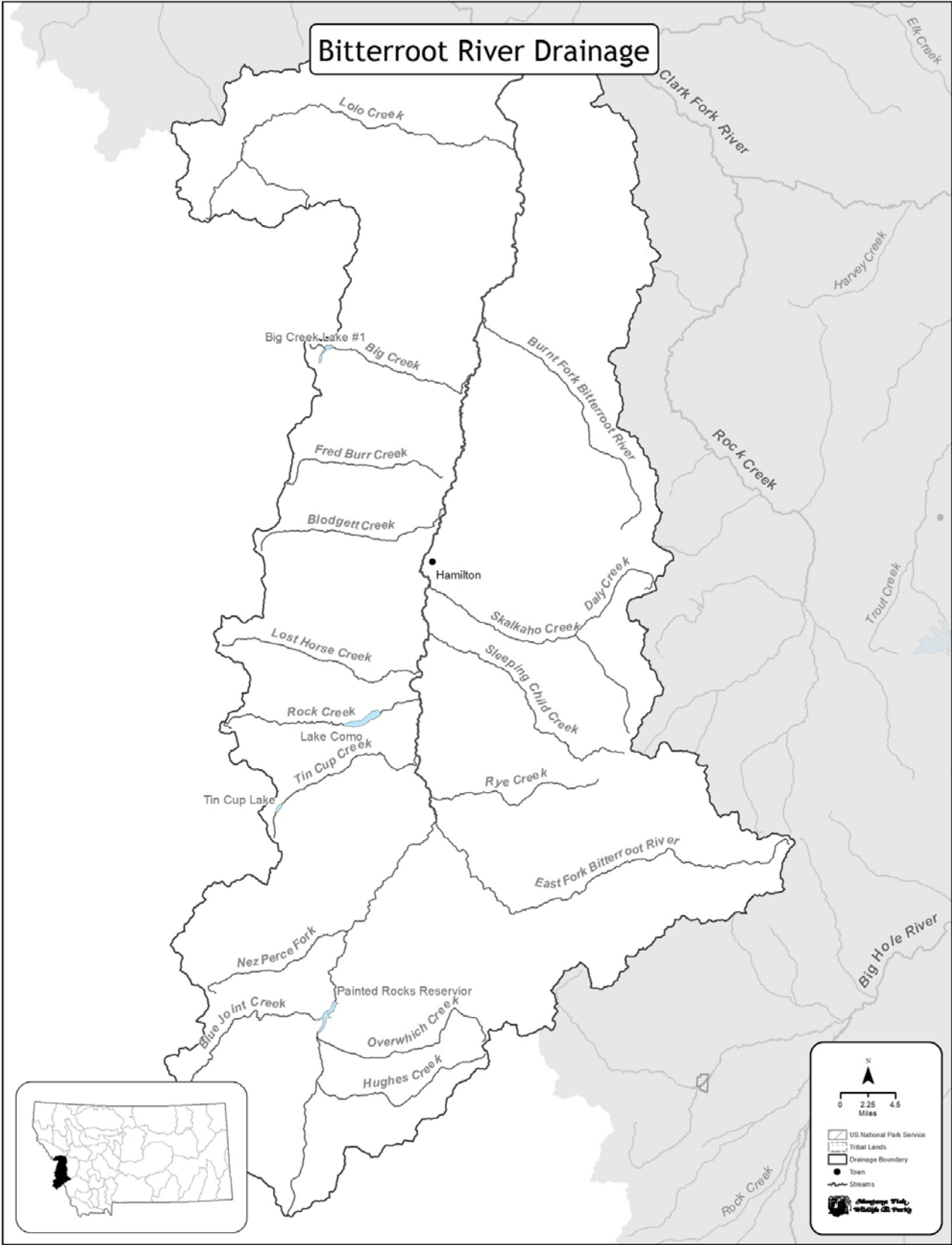
Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Seeley Lake and Salmon Lakes	1,707 acres	Bull trout (N)	Wild	Conservation	Conserve and enhance migratory populations. Continue protective regulations to prohibit angler harvest.
		Westslope cutthroat trout (N)	Hatchery/ Wild	Put-Grow-Take	Evaluate stocking to determine success to creel and effects on endemic populations of WCT. Consider stocking sterile fish after evaluation of performance.
		Kokanee salmon	Wild/ Hatchery	Put-Grow-Take	Evaluate stocking to optimize number stocked, size of fish and angler catch rate; evaluate relative contribution of wild & stocked fish.
		Brown trout Brook trout	Wild	General	Provide liberal harvest opportunity to reduce competition and hybridization with and predation on native trout. Consider measures to reduce number if native trout numbers and angling opportunity would increase.
		Largemouth bass	Wild	General	Maintain existing fishery but consider liberalizing harvest opportunity
		Yellow perch, Pumpkinseed	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with trout.
		Northern pike	Wild	Suppression	Emphasize harvest to reduce predation on trout; derbies must harvest fish. Explore other harvest means such as angler incentives and commercial methods that would need legislative approval.

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Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Placid Lake	1,300 acres	Bull trout (N)	Wild	Conservation	Protect and enhance any remnant population.
		Westslope cutthroat trout (N)	Wild/ Hatchery	Put-Grow-Take	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish
		Kokanee salmon	Hatchery/ Wild	Put-Grow-Take	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish
		Brook trout Brown trout	Wild	General	Provide harvest opportunity for anglers with liberal regulations.
		Yellow perch, Pumpkinseed	Wild	General	Provide quality harvest opportunity.
		Largemouth bass	Wild	Quality	Maintain and enhance quality of fishery through restrictive regulations.
Harpers Lake	15 acres	Rainbow trout, Westslope cutthroat trout	Hatchery	Put-Grow-Take	Manage as a quality trout harvest opportunity with high angler catch rates.
		Yellow perch	Wild	General	Maintain liberal harvest limits and reduce numbers if possible to reduce competition with trout.
Habitat needs and activities: Monitor lake water quality and eutrophication with Clearwater Resource Council. Manage lake water levels to balance instream flow needs of outlet streams.					
Blackfoot River and Tributaries (Clearwater River to Confluence with Clark Fork River)	35 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue with no harvest regulations in order to enhance fluvial populations for conservation and WCT angling. Continue to maintain and enhance bull trout where practical. Continue to manage for genetically pure WCT.
		Rainbow trout, Brown trout	Wild	Quality	Maintain present numbers and sizes.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Other introduced game fish (e.g., Yellow perch, Northern pike, Brook trout)	Wild	General	Manage for liberal harvest and contain distribution where possible.
Habitat needs and activities: Improve habitat to support ecosystem function and production of wild trout and whitefish.					



BITTERROOT RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Bitterroot River drainage includes the Bitterroot River and its tributaries, including the East and West Forks of the Bitterroot River, Lolo Creek and their tributaries. The Bitterroot River begins at the junction of East and West Forks. It flows northward for 80 miles through Ravalli and Missoula Counties, draining a 1,891 square-mile basin to Missoula, where it joins the Clark Fork River. The Bitterroot watershed includes 9,000-foot peaks in the headwaters and heavily forested slopes, rangelands and wetlands on the valley floor. The headwaters of most of the tributaries originate on the Bitterroot National Forest. The East Fork of the Bitterroot River begins in the Anaconda-Pintler Wilderness. Tributaries of the West Fork Bitterroot River and the Bitterroot River from the west drain out of the Selway-Bitterroot Wilderness.

There are 83 natural lakes and reservoirs in the drainage, totaling 3,070 surface acres. Most natural lakes are mountain lakes in the headwaters of the Anaconda-Pintler and Selway-Bitterroot Wilderness areas. Two large reservoirs are Lake Como and Painted Rocks Reservoir. Lake Como receives considerable human use for fishing and other recreational activities. It also contributes about 3,000 acre-feet of water to the Bitterroot River each year. Painted Rocks Reservoir supplies 25,000 acre-feet of water to the Bitterroot River for instream flows and irrigation. Both Lake Como and Painted Rocks Reservoir experience considerable drawdown on an annual basis.

FISHERIES MANAGEMENT

Located in the southwestern part of the state, the Bitterroot River is very popular for recreation. The mainstem river is generally ranked with the top five in the state for fishing pressure, which generally exceeds 100,000 angler days a year. The river's outstanding natural resources and diversity of recreational opportunities, combined with its proximity to Missoula, contribute to its popularity.

The Bitterroot River is managed as a wild trout fishery, emphasizing natural reproduction. The basin is also a focus area for native fish recovery efforts. The Bitterroot River is home to 10 native fish species including bull trout, westslope cutthroat trout, mountain whitefish, northern pike minnow, longnose dace, redbelt shiner, peamouth, longnose and largescale sucker, and Columbia slimy sculpin. Nonnative fish species inhabiting the Bitterroot include brown trout, brook trout, rainbow trout, northern pike, and largemouth bass. Dominant fish species vary from westslope cutthroat in the headwaters to mountain whitefish in the Bitterroot River. Other than mountain whitefish, rainbow trout are the dominant sportfish in the mainstem of the Bitterroot River. Brown trout have increased in numbers in the East and West Forks of the Bitterroot drainage and some tributaries over the past 10 years. Coincident with the brown trout expansion is the decline of rainbow trout in the upper Bitterroot drainage. Whirling disease is believed to be the primary reason for this decline. Fishing regulations are designed to allow more harvest of brown trout in these areas. Lolo Creek is also dominated by brown trout, but transitions into brook trout and westslope cutthroat trout populations in headwater areas. Information is lacking

on the abundance and life histories of mountain whitefish and non-game native fishes. Efforts are needed to describe these and monitor trends.

Bull trout are rare in the mainstem of the Bitterroot River. Fluvial forms exist in the East and West Forks, but are also uncommon. Adfluvial lifeforms exist primarily in Painted Rocks Reservoir. Resident lifeforms exist in many smaller tributaries throughout the drainage.

Angling occurs year-round and is most popular in the early spring, summer and fall. Opportunities exist for both wade and float angling and while fly-fishing is particularly popular, artificial lures and bait fishing is also common.

Angling restrictions have improved westslope cutthroat trout numbers in the Bitterroot River upstream of Hamilton, but are less effective below Hamilton. Therefore, efforts in the Bitterroot River drainage to favor native salmonids (trout and whitefish) should be focused upstream of Hamilton. The greatest improvements for native salmonids are likely to be in tributaries or river sections where they dominate. Conversely, the Bitterroot River drainage below Hamilton should have an emphasis of restoring ecosystem function for all salmonids. Native salmonids in this area should be protected, or enhanced if possible.

Lake Como and Painted Rocks Reservoir offer some angling opportunity. Lake Como is stocked annually with catchable rainbow trout and westslope cutthroat trout. Due to the significant drawdowns and low productivity, fishing is only fair in each reservoir.

Some high mountain lakes are stocked with westslope cutthroat trout and some support wild populations of cutthroat, rainbow and brook trout. Most lakes are kept fishless to help conserve other native fauna (e.g., amphibian populations). Unstocked lakes comprise a geographic distribution and range of sizes and depths thought to help amphibian populations.

HABITAT

The Bitterroot River, particularly downstream of Hamilton, has been subject to dewatering. Prior to the early 1980's, irrigation demands significantly depleted streamflows during midsummer. Based on fisheries studies in the early 1980's and an agreement with the local irrigators and the Montana Department of Natural Resources and Conservation, water from Painted Rocks Reservoir began to be released during midsummer to supplement flows in the river. Since that time, a Bitterroot River water commissioner has been appointed each year to manage releases and withdrawals from the river to maintain minimum streamflows targeted at Bell Crossing, where a USGS gage was established. The target minimum flow of about 400 cfs at Bell Crossing is met during wet years, but not during very dry years, when streamflows can drop to below 200 cfs. In the early 1990's the dam at Lake Como was raised 3 feet and the extra stored water is released into the Bitterroot River after Labor Day each year.

Many of the tributaries of the Bitterroot River are also subject to midsummer dewatering. Efforts to restore streamflows to these streams have been difficult. Dewatering of tributaries remains one of the most serious issues for the fishery in the Bitterroot River. Rainbow and Brown trout spawn in the lower ends of these tributaries and the river. Native trout spawn in streams on the Bitterroot National Forest.

Water temperature in the Bitterroot River often exceeds 72°F in the lower reaches. During particularly warm summers, fishing restrictions have been implemented until water temperatures drop to more tolerable levels for trout.

Homes and agricultural development along the Bitterroot River have led to the need for streambank stabilization. The Bitterroot River migrates laterally long distances in some years, which endangers homes and other developments that are near the river. As a consequence, approximately 12.5% of the streambanks on the river have been stabilized, mostly to protect residential development. This is an ongoing issue due to the fact that streambank stabilization is usually disruptive of recreational uses and alters some of the natural functions of the river. More stringent regulations in recent years have slowed homebuilding within the floodplain, and have prevented some of the building of riverfront homes that are often threatened by the migration of the river.

Lolo Creek is also a stream that has been heavily impacted by bank stabilization. Much of the mainstem channel was relocated or altered during the construction of U.S. Highway 12. Conservation efforts have focused on the upper watershed. In 2010-2011, thousands of acres of corporate timberlands in the upper basin were converted to public ownership (managed by USFS) as part of the “Montana Legacy Project”.

Water quality in the Bitterroot is high with some indication of high nutrient levels in the lower river. Suspended sediment in the river is generally low, except during spring runoff when the river experiences increased turbidity. The Montana Department of Environmental Quality classifies the Bitterroot as a B-1 stream, meaning the river should be maintained for activities such as drinking and municipal uses, swimming and recreation, growth and propagation of trout and associated aquatic life, and as an agricultural and industrial water supply.

FISHING ACCESS

Fishing access to the Bitterroot River is excellent. There are 13 fishing access sites along the mainstem of the Bitterroot River managed by MFWP. In addition, there are several publicly owned or managed sites along the river that are commonly used by anglers. Along the East and West Forks of the Bitterroot River, public access is good due to the public lands managed by the Bitterroot National Forest. Some of these sites are managed as fishing access sites and others are informally used by anglers. Lolo Creek also has a number of public access sites that are managed by FWP and the USFS.

SPECIAL MANAGEMENT ISSUES

Social Conflicts on the Bitterroot River

Presently, there is no River Recreation Plan in effect for the Bitterroot River. Due to high angling pressure, there are some social conflicts. On the West Fork of the Bitterroot River, information is being collected to understand when and where conflicts occur .

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR BITTERROOT RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
West Fork Bitterroot River and Tributaries Above and Including Painted Rocks Reservoir	565 acres of reservoir and 42 miles of mainstem	Bull trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout and enhance migratory populations for conservation.
		Westslope cutthroat trout (N)	Wild	Conservation	Maintain or enhance numbers above present levels for conservation and angling. Investigate the genetics of the WCT populations and possibly manage as a refuge.
		Brook trout	Wild	General	Maintain liberal harvest regulations to lessen competition and hybridization and help meet native trout goals.
Habitat needs and activities: Continue to manage connectivity to favor native fishes.					
East Fork Bitterroot River and West Fork Bitterroot River Below Painted Rocks Reservoir	56 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout and enhance migratory populations for conservation and WCT angling.
		Brown trout	Wild	Liberal Regulations	Maintain liberal harvest regulations to allow for opportunity to harvest brown trout and reduce competition with and predation on native trout. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
		Rainbow trout	Wild	Restrictive Regulations	Maintain catch-and-release regulations in attempt to improve fishery while recognizing that whirling disease is likely the primary limiting factor.
Habitat needs and activities: Continue to manage connectivity to favor native fishes.					

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

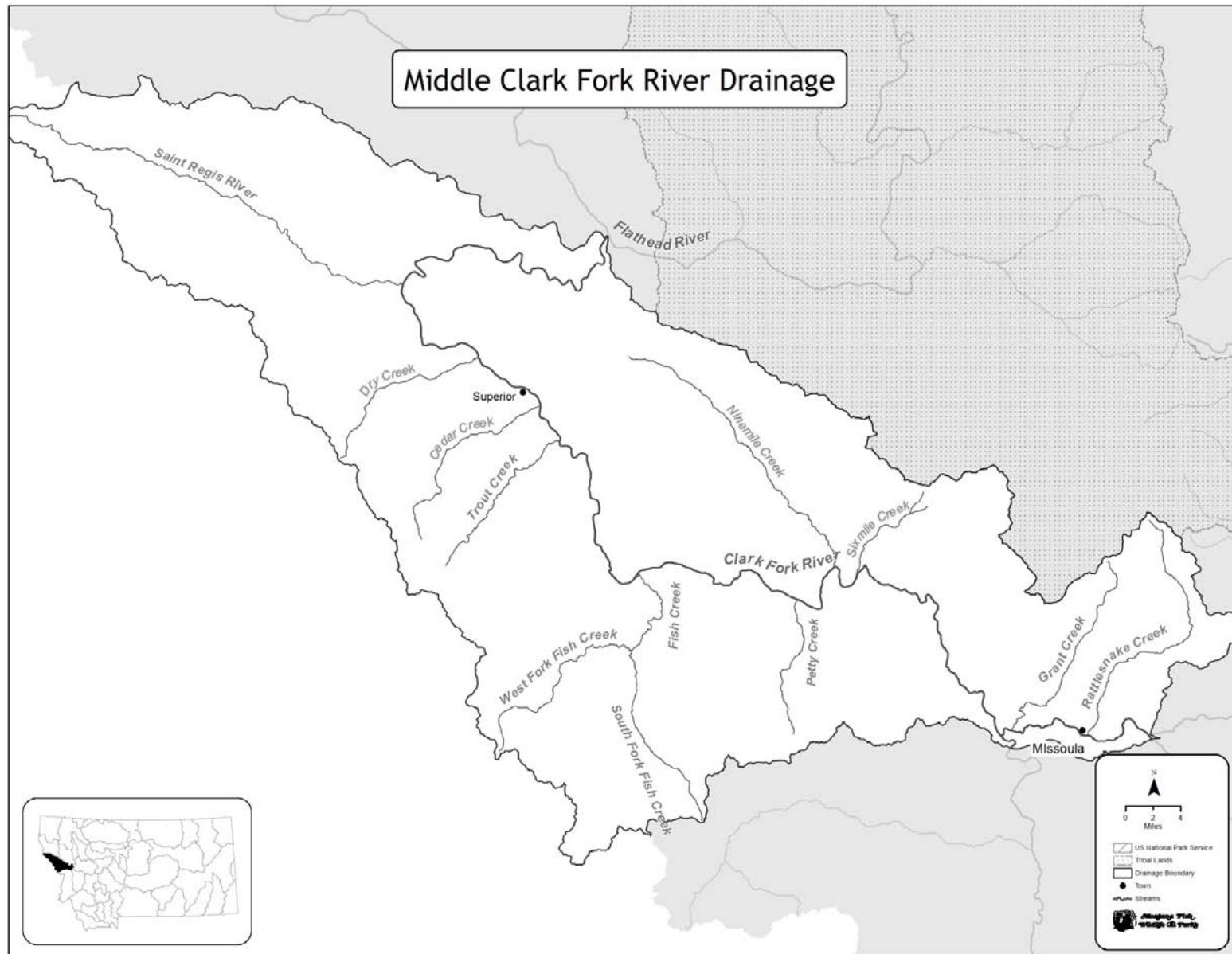
Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Tributary streams To the East Fork Bitterroot River and West Fork Bitterroot River Below Painted Rocks Reservoir	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and resident populations. Continue yearlong closure on angling for bull trout and enhance WCT fishery. Consider isolation of WCT populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence.
		Brown trout, Rainbow trout, and Brook trout	Wild	General	Maintain liberal harvest opportunity. In native species strongholds, consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.
Bitterroot River - Confluence of East and West Forks downstream to Blodgett Creek Near Hamilton	30 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout. Enhance fluvial populations of WCT for conservation and angling.
		Rainbow trout, Brown trout	Wild	Restrictive Regulations	Maintain present numbers and sizes. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
Habitat needs and activities: Enhance habitat to favor native trout and whitefish.					
Skalkaho Creek	24 miles	Rainbow trout, Brown trout, Brook trout	Wild	General	Maintain liberal harvest opportunity. Consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.
		Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Protect and enhance numbers of fish. Continue yearlong closure on angling for bull trout. Enhance fluvial populations of WCT for conservation and WCT angling.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Tributary Streams to Bitterroot River (other than Skalkaho Creek) from Confluence of East and West Forks Downstream to Blodgett Creek Near Hamilton	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and resident populations. Continue yearlong closure on angling for bull trout and enhance westslope cutthroat trout fishery. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence.
		Rainbow trout, Brown trout, Brook trout,	Wild	General	Maintain liberal harvest on and consider measures that reduce the abundance in reaches protected by a barrier or in reaches considered native species strongholds.
Lake Como	911 acres	Rainbow trout, Westslope cutthroat trout (N)	Hatchery	Put, Grow-Take	Provide liberal harvest opportunity
Bitterroot River - Blodgett Creek to confluence with Clark Fork	50 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout and enhance fluvial WCT populations for conservation and WCT angling.
		Rainbow trout and Brown trout	Wild	Quality	Manage trout harvest to support quality angling opportunity.
Habitat needs and activities: Improve habitat to support ecosystem function and production of trout and whitefish. Manage water from Painted Rocks Reservoir to maintain fishery with the goal of 400 cfs to Bell Crossing.					
Tributary streams To Bitterroot River from Blodgett Creek to the Confluence with Clark Fork River	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and resident populations. Continue yearlong closure on angling for bull trout and enhance cutthroat fishery. Consider isolation of WCT populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence.
		Rainbow trout, Brown trout, Brook trout	Wild	General	Maintain liberal harvest on and consider measures that reduce the abundance in reaches protected by a barrier or in reaches considered native species strongholds. Enhance rainbow

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
					and brown trout that provide recruitment to the mainstem and are not located in reaches with abundant native trout.
Hieronimus Pond	2 acres	Rainbow trout	Hatchery	Family Fishing Water	Primarily kids fishing pond. Facilitate high catch rates and quality opportunity for kids and handicapped.
		Yellow perch, Largemouth bass	Wild	General	



MIDDLE CLARK FORK RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Middle Clark Fork River drainage begins at the confluence of the Clark Fork and Blackfoot rivers at Milltown, and extends downstream for 120 miles to the mouth of the Flathead River. The river flows generally westward as it runs through Missoula, Mineral and Sanders Counties. Just downstream of the city of Missoula, the Bitterroot River enters and nearly doubles the river's discharge. Other major tributary watersheds (upstream to downstream) include Rattlesnake Creek, Grant Creek, Mill Creek, Ninemile Creek, Petty Creek, Trout Creek, Cedar Creek and the St. Regis River system. River volume roughly doubles again when the Clark Fork joins with the Flathead River near Paradise.

The main stem Clark Fork River channel is generally entrenched and stable throughout its length. The one exception is a 25 mile section through the Missoula Valley from Kelly Island (west side of Missoula) to the Ninemile Creek area (near Huson), where the river has a wide, accessible floodplain and active lateral migration. The river alternates between relatively narrow rock canyons and wider agricultural valleys as it progresses downstream. Major canyons include Hellgate Canyon (East Missoula), the Alberton Gorge (Alberton) and the "Cutoff" section between St. Regis and the Flathead River Confluence. Land ownership along the main stem is predominantly private, with scattered FWP, DNRC and USFS parcels.

Tributary watersheds include more than 50 coldwater trout streams that lie primarily on publically-owned timberlands at high and mid-elevations. As tributaries reach foothills and near the valley floor, private land ownership becomes much more prevalent. Most tributary streams are bisected by major transportation system crossings (i.e., railroad, interstate highway, frontage roads) on the valley floor before they reach the Clark Fork River. Many of these crossings on smaller streams act as complete barriers to upstream fish movement.

There are numerous high elevation "mountain" lakes within the Middle Clark Fork Basin, as well as a few constructed lakes and ponds on the valley floor. More than 120 alpine mountain lakes (> 1 acre) occur in two general areas: (1) in the Bitterroot Mountains along the Montana-Idaho divide from Alberton to Lookout Pass; and (2) within the Rattlesnake National Recreation Area and Wilderness area near Missoula. Although some have been enhanced by dams, nearly all of these waters are natural lakes formed in high glacial troughs and cirque basins. Valley ponds and small lakes (managed as public fisheries and recreation sites) are generally man-made reservoirs and reclaimed gravel pits. These include Frenchtown Pond, Kreiss Lake, Silvers Lagoon at McCormick Park and several other small water bodies.

FISHERIES MANAGEMENT

Located in the west-central part of the state, the middle Clark Fork River is a large system that runs through a major population center (Missoula) and developed valleys downstream. Although the fishery is not as renowned as in some of its major tributaries (e.g., Rock Creek, Blackfoot River, Bitterroot River), the middle Clark Fork River supports a popular trout fishery. This system has gained national notoriety in the past decade with the removal of Milltown Dam, clean-up of river contaminants at its upper end, and anticipated recovery of fishery resources.

The middle Clark Fork River is managed as a wild trout fishery, emphasizing natural reproduction. Although native bull trout (low numbers) and westslope cutthroat trout (moderate numbers) are present throughout all reaches, the river fishery is dominated by non-native rainbow trout, rainbow x westslope cutthroat trout hybrids and brown trout. Rainbow trout and their hybrids generally make up 70-80% of the trout population within this river section. Brown trout are found in moderate densities in the Missoula area, but generally decrease in abundance in lower reaches. Mountain whitefish are common throughout the mainstem river section.

In addition to salmonids, the Middle Clark Fork is home to eight other native fish species including peamouth, northern pikeminnow, longnose dace, redbelt shiner, longnose sucker, largescale sucker, and two species of sculpin. Ten non-native fish species are also common in various parts of the basin, including brown trout, brook trout, rainbow trout, Yellowstone cutthroat trout, northern pike, pumpkinseed, largemouth bass, smallmouth bass, yellow perch and white sucker. Prior to removal of Milltown Dam and Milltown Reservoir, northern pike were becoming more prevalent in the Clark Fork River. The reservoir served as a primary spawning and rearing area for this species, which then dispersed downstream and occupied the mainstem river in significant numbers. Since removal of the dam, northern pike numbers have declined and are no longer considered a major threat to salmonids populations. More recently, smallmouth bass densities have increased dramatically in the lower Flathead River. However, no major colonization of the Clark Fork River upstream of the Flathead River confluence has been detected.

Tributary stream drainages support a range of abundant, resident trout species and are essential for spawning and rearing of fluvial (river-migratory) trout that reside in the mainstem river. Species composition varies greatly among tributaries and, in many streams, changes along a continuum from headwaters to mouth. Larger tributaries are generally “open” to fish movement with the Clark Fork, and are dominated by rainbow/cutthroat trout hybrids and brown trout. From the mainstem, species composition typically transitions to westslope cutthroat trout in an upstream direction, with pockets of brook trout also occurring in many transition areas and warmer tributaries. Smaller tributary systems and those at higher elevations are generally dominated by westslope cutthroat trout. Many of these populations are protected from hybridization with rainbow trout by artificial fish barriers associated with the extensive valley transportation system (e.g., road culverts, railroad tunnels).

The coldest remaining systems with suitable habitat still support viable bull trout populations, including Rattlesnake Creek, Fish Creek, Cedar Creek, and portions of the St. Regis River. The Fish Creek drainage supports the most intact habitat and abundant native trout populations within the middle Clark Fork region. These few remaining bull trout populations provide a limited amount of bull trout recruitment to the Clark Fork River where densities are 1-2 adults per mile in most reaches.

Although nearly all of the >100 mountain lakes in the basin were historically fishless, roughly 45% now support trout populations. Many still contain self-sustaining, wild populations of brook trout, westslope cutthroat trout, rainbow trout, and Yellowstone cutthroat trout that were introduced in the mid-1900s. Most of these lakes are no longer stocked, but many others with limited natural reproduction are stocked periodically with westslope cutthroat trout. Management of stocked lakes ranges from high density, frequently planted waters designed for high catch rates to infrequently stocked, low density trophy waters. A large number of fishless lakes are also

maintained to preserve natural ecological integrity (e.g., for conservation of native amphibians such as the long-toed salamander and spotted frogs). Management strategies and information for all mountain lakes in the basin are described in recent plans available from the FWP Region 2 office in Missoula.

Angling occurs year-round on the middle Clark Fork River, but is most popular in the early spring, summer and fall. Opportunities exist for both wade and float angling and while fly-fishing is particularly popular, artificial lures and bait fishing are also common. Special fishing regulations have been instituted to protect spawning fish, native fish strongholds and staging areas, and to retain the quality of trout fisheries – despite increasing fishing pressure. Summer and fall also offer excellent angling opportunities on tributary streams and mountain lakes.

Valley lakes and ponds provide popular put-and-grow trout fisheries that are accessible for most of the year. The waters are stocked frequently and offer opportunities for high catch rates and liberal harvest. All of these fisheries are geared to kids fishing and family-friendly environments with easy access.

HABITAT

The middle Clark Fork River is considered a recruitment-limited fishery where enhancing spawning access for wild fish and improving the quality of tributary habitats has been a priority for the past decade. Restoration and improvement efforts have occurred throughout the watershed, but have focused on native fish strongholds. Fish passage improvements, riparian restoration projects, instream enhancements, fish screens, etc., have involved a number of partners on both public and private lands. As the largest land manager in the basin, the USFS has undertaken many activities on their lands associated with fish passage and the forest road system. In addition, key land acquisitions have been completed in tributary drainages to protect spawning and rearing habitat. Notable projects include public acquisition of more than 50,000 acres to form the Fish Creek Wildlife Management Area and purchase of more than 5 miles of riparian corridor on Cedar Creek. Numerous other conservation easements and smaller acquisitions have been completed by public and private organizations throughout the basin.

River and stream dewatering from irrigation is generally not a significant limiting factor in the basin, particularly when compared with neighboring river systems. However, legacy impacts of historic mining and timber management (roads) remain significant factors degrading habitat quality on a large scale and in many tributary drainages. Restoration and remediation activities addressing these impacts will likely be a priority in the future that will be led by the USFS, Trout Unlimited, FWP and other partners.

FISHING ACCESS

There are more than 15 publicly owned or managed access sites along the river. Some sites are located near local communities and, in addition to river access, provide convenient land-based recreation opportunities. The section of the Middle Clark Fork River between St John's FAS and Forest Grove FAS (Alberton Gorge), is a popular stretch of river for scenery, whitewater and angling with much of the riverfront in that section owned by FWP. The Alberton Gorge is managed by FWP's Parks Division. Overall, public access opportunities along the Middle Clark Fork are good with no urgent needs for additional access.

SPECIAL MANAGEMENT ISSUES

Habitat and Water Quality Issues

Over the past decade, a tremendous amount of resources have been invested in the removal of Milltown Dam, remediation of river contaminants, and restoration of the Clark Fork River. Monitoring of river habitat, water quality, and fish and aquatic populations will be essential in evaluating the long-term effects of this work. Similarly, possible contaminant remediation and restoration at the Smurfit-Stone Mill site near Frenchtown could have major benefits for river water quality, floodplain function, and habitat quality in that reach.

Social Conflicts

Proximity to Missoula, a large overall population base, and many conflicting demands make managing public recreation challenging on the Clark Fork River. In 2011, the reach through Missoula and downstream to the Alberton Gorge were part of a revised river recreation plan, balancing motorized and non-motorized boat use in the area. This and other issues, including management of river access and non-angling recreationists, will certainly be a focus in the future.

In 2011, FWP completed a public process to revise boating regulations for this section of the Clark Fork River. The regulation changes were in response to an increase in river use in and around Missoula, and intended to provide for diverse river recreation opportunities and to address public safety and social concerns associated with fast-moving motorboats operating in proximity to other users. These regulations took effect November 26, 2011.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR MIDDLE CLARK FORK RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Clark Fork River - Blackfoot River confluence downstream to confluence with Flathead River	120 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout. Enhance fluvial populations for conservation and catch-and-release WCT fishery.
		Rainbow trout, Brown trout	Wild	Quality	Protect adults and fishery quality through fishing regulations. Protect habitat, ensure adequate connectivity with tributaries & enhance natural recruitment in areas that are not native trout strongholds.
		Northern pike, Smallmouth bass	Wild	Suppression	No creel limit for pike; encourage harvest of both introduced warmwater species to reduce competition with and predation on trout.
Habitat needs and activities: Assess long-term impact of Milltown Dam removal. Assess contamination of Smurfit-Stone Mill site and facilitate remediation/restoration. Further enhance connectivity with tributaries where appropriate. Protect and improve habitat quality in spawning and rearing areas to enhance natural recruitment of wild and native trout.					
Kreiss Lake	10 acres	Westslope cutthroat trout	Hatchery	Put, Grow and Take	Facilitate high catch rates and quality harvest opportunity.
		Largemouth bass	Wild	General	Provide liberal harvest opportunity.
Habitat needs and activities: Evaluate westslope cutthroat trout stocking prescription. Ensure that adequate water volume is maintained in lake.					
Silvers Lagoon (McCormick Pond)	5 acres	Westslope cutthroat trout, Rainbow trout	Hatchery	Family Fishing Water	Kids fishing pond - Facilitate high catch rates and quality harvest opportunity for kids.
		Northern pike, Pumpkinseed, Yellow perch	Wild	General	Provide liberal harvest opportunity. Reduce numbers if possible.
Habitat needs and activities: Reduce entrainment of unwanted fish from water supply canal. Ensure adequate water exchange rate.					
Frenchtown Pond	22 acres	Rainbow trout	Hatchery	Family Fishing Water	Facilitate high catch rates and quality harvest opportunity for kids fishing events and families.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Largemouth bass	Transfer	Quality	Restrictive harvest regulations to ensure quality of fishery. Continue to plant adult fish if available.
		Northern pike, Pumpkinseed, Yellow perch	Wild	General	Provide liberal harvest opportunity. Reduce numbers if possible.
Habitat needs and activities: Continue adult bass transfer from Lee Metcalf Refuge. Ensure enforcement presence to promote compliance and maintenance of quality largemouth bass fishery.					
Fish Creek, Cedar Creek Little Joe Creek, Drainages	264.7 miles 42.7 miles 37.6 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and resident populations. Continue yearlong closure on angling for bull trout.
		Rainbow trout, Brown trout, Brook trout	Wild	General	Maintain present numbers and sizes. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
Habitat needs and activities: Improve habitat to support ecosystem function and production of native trout and whitefish. Enforcement presence needed to ensure compliance. Eliminate brook trout from headwater lakes.					
Open Tributary Systems (Fish Barriers Generally Absent): St. Regis River, Ninemile Creek, Rattlesnake Cr. Grant Creek, Dry Creek, Trout Creek, Mill Creek, Albert Creek, Nemote Creek,	38.6 miles 25.5 miles 23.3 miles 18.3 miles 15.3 miles 14.7 miles 13.4 Miles 11.4 Miles 9.8 Miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Conserve and enhance migratory and resident populations. Continue protective regulations to enhance westslope cutthroat trout fishery. Continue yearlong closure on angling for bull trout.
		Rainbow trout, Brown trout	Wild	Quality	Protect adult spawners and fishery quality through fishing regulations. Protect habitat and ensure adequate connectivity with tributaries to enhance natural recruitment in areas that are not native trout strongholds.
		Brook trout	Wild	General	Provide liberal harvest opportunity and reduce numbers if possible.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Sixmile Creek, Siegel Creek, Petty Creek	8.9 Miles 7.0 Miles 4.3 Miles				
Habitat needs and activities: Improve habitat quality and connectivity where needed.					
Closed Tributary Systems (Barriers Prevent Upstream Movement from Clark Fork River) - Contain Genetically Pure, Isolated Westslope cutthroat trout Populations:		Westslope cutthroat trout (N)	Wild	Conservation	Ensure isolation and restrict introduction of hybridizing species. Restrict harvest to maintain or enhance numbers.
Rock Creek	18.7 miles	Brook trout		General	Provide liberal harvest opportunity and reduce numbers where possible.
Rock Creek	9.5 miles				
Deep Creek	9.4 miles				
Tamarack Creek	8.7 miles				
Thompson Creek	8.6 miles				
Flat Creek	8.2 miles				
Deep Creek	7.5 miles				
Second Creek	7.4 miles				
Meadow Creek	7.3 miles				
Cold Creek	7.2 miles				
First Creek	6.7 miles				
Sevenmile Creek	6.2 miles				
Johnson Creek	6.1 miles				
Marshall Creek	4.8 miles				
Patrick Creek	4.5 miles				
West Mountain Creek	4.2 miles				

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Slowey Gulch Quartz Creek Butler Creek O'Keefe Creek Lavall Creek	3.1 miles 3.1 miles 2.7 miles 1.7 miles 1.6 miles				
Habitat needs and activities: Maintain fish passage barriers isolating populations from Clark Fork River, improve habitat and connectivity within drainages, and restrict new fish introductions – particularly in fish ponds.					
High Elevation (Mountain) Lakes: 121 Lakes Total > 1 Acre in Bitterroot Mountains and Rattlesnake Wilderness <i>See specific Mountain Lake Management Plan Reports for Each Water Body</i>	1-30 Acres each, 861 Acres Total	Westslope cutthroat trout (N)	Wild	Conservation	13 lakes – Self-sustaining fisheries of various quality.
		Westslope cutthroat trout (N)	Wild/ Hatchery	Put, Grow and Take	14 lakes – Management objective varies by lake, including trophy, quality, and harvest-oriented fisheries.
		Brook trout	Wild	General	18 lakes – Reduce densities or eliminate to improve quality.
		Yellowstone cutthroat trout	Wild	General	3 lakes – Self-sustaining fisheries of various quality
		Rainbow trout	Wild	General	8 lakes - Self-sustaining fisheries of various quality
		<i>Fishless Lakes</i>	N/A	Conservation	65 lakes – Maintain ecological integrity.
Habitat needs and activities: Evaluate stocking prescriptions for Put-Grow-Take fisheries. Maintain fishless lakes. Remove or suppress brook trout to enhance quality of fisheries and complement downstream native fishery goals.					



LOWER CLARK FORK RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Lower Clark Fork River begins at its confluence with the Flathead River and terminates at the inlet to Lake Pend Oreille in Bonner County, Idaho. In Montana, this drainage falls almost entirely within Sanders County. The river flows for 94 miles through a drainage of 1.4 million acres before exiting the state. Elevations range between 2,191 and 8,735 feet. Approximately 83% of the land within the drainage is managed by the Lolo and Kootenai National Forests. Privately owned land is primarily confined to the valley floor and the Thompson River drainage. Primary land uses include agriculture, wilderness, forest products, recreation and hydropower generation.

There are 49 lakes or reservoirs in the drainage, totaling 14,483 surface acres. Numerous, natural headwater lakes are found at higher elevations. The largest of these lakes, Wanless Lake, lies within the Cabinet Mountain Wilderness area. The Thompson, Bull and Vermillion rivers are the largest tributaries contributing to the lower Clark Fork. The lower Clark Fork River is comprised of riverine and reservoir habitats. Approximately 62 miles of the river has been inundated by the Thompson Falls, Noxon Rapids and Cabinet Gorge Reservoirs built in 1917, 1959 and 1952 respectively. These reservoirs were impounded to generate hydroelectricity. Noxon Reservoir is the largest reservoir impounding an area of 7,940 acres at full pool followed by Cabinet Gorge (23,200 acres) and Thompson Falls (969 acres).

FISHERIES MANAGEMENT

Diverse habitat types throughout the Lower Clark Fork River drainage provide numerous fishing opportunities, including warm, cool and cold water sport fisheries and important habitat for native species. Largemouth and smallmouth bass, northern pike, yellow perch and several trout species are the primary species targeted by fishermen. Native species management is primarily focused on trout and whitefish.

Native species within the drainage include bull trout, westslope cutthroat trout, mountain whitefish, longnose and largescale sucker, northern pikeminnow, peamouth, longnose dace, reidside shiner, and Columbia slimy and Rocky Mountain Rocky Mountain sculpins. Native species management is focused on salmonids with an emphasis on bull trout recovery. The lower Clark Fork River and several of its tributaries are designated as bull trout critical habitat. Bull trout in this drainage exhibit both resident and migratory life histories with some fish moving to mainstem rivers, reservoirs or Lake Pend Oreille to mature. Primary impacts to this species include passage barriers, habitat degradation and introduced species. Currently these impacts are being addressed through the Avista Utilities and PPL Montana hydromitigation programs, which are required by FERC and stipulated in their operating licenses. Fish passage at the Thompson Falls Dam, owned and operated by PPL, is facilitated by a fish ladder that began operation in spring 2011. PPL Montana also provides funding for monitoring and habitat restoration. Upstream passage at the Cabinet Gorge Dam, owned and operated by Avista Utilities, is facilitated by a capture and transport program that returns adult fish to their natal tributaries based on genetic assignments. Additionally, the juvenile trap and transport program traps out-

migrating juvenile bull trout from tributaries and transports them to Lake Pend Oreille. Both utilities have programs to protect and restore tributary habitats. In Lake Pend Oreille, lake and rainbow trout are being suppressed by Idaho Fish and Game to benefit kokanee and migratory bull trout, many of which originate in the Clark Fork drainage. An experimental nonnative fish suppression and exclusion project is being conducted in the East Fork Bull River to assess the effectiveness of weir exclusions and fish removal on brown and brook trout. Enhanced bull trout education and enforcement has also been a priority of the Avista mitigation program.

The lower Clark Fork drainage contains numerous high elevation ponds and lakes in tributary headwaters. Many of these waters contain fish that are supported by natural reproduction or stocking. Westslope cutthroat trout are the primary species found in most of these habitats, however, some waters contain brook trout and rainbow trout. Access to many of these lakes is limited to non motorized travel; some are accessible by vehicle. Angling pressure is highest during the summer and fall when these waters are accessible. Non-native fish may be replaced with westslope cutthroat trout if the non-natives threaten downstream native fish populations. Mountain lake fisheries management is coordinated with wilderness management as necessary. Some lakes are left intentionally fishless.

Tributaries to the Clark Fork River provide angling opportunity for trout. The Thompson and Bull Rivers receive significant angling pressure with other tributaries receiving considerably less. With the exception of the Thompson River, tributaries are closed to angling between November 30 and the third Saturday in May to protect spawning westslope cutthroat trout.

The Thompson River below its confluence with the Little Thompson River remains open year-round, providing fishing opportunity for whitefish and trout anglers. Trout fishing is limited to catch and release for all species between December 1 and the third Saturday in May and cutthroat and rainbow trout must be released year-round.

Riverine portions of the Clark Fork River provide some fishing for smallmouth bass and northern pike, and limited trout fisheries. Native suckers and minnows dominate this habitat. Cold water species such as trout and whitefish are limited due to warm summer water temperatures.

Reservoirs on the lower Clark Fork River are popular warm and cool water fisheries. Yellow perch and northern pike are pursued by anglers year round and largemouth and smallmouth bass fishing picks up as water temperatures warm in the spring. Noxon Reservoir hosts up to seven bass fishing tournaments annually and currently holds the state record for northern pikeminnow and largemouth bass. Spring walleye fishing between Thompson Falls Dam and Noxon Reservoir is increasing in popularity as the illegally introduced population expands.

Walleye were illegally introduced into Noxon Reservoir in the mid to late 1980s. Since then, walleye catch rates slowly increased until 2009 when catch rates began to rapidly increase, doubling in 2010 and 2011. Expanding walleye populations pose a significant predation threat to native and sport fisheries in Noxon Rapids and Cabinet Gorge Reservoirs and future management actions will focus on this species.

One sub-impoundment on Noxon Rapids Reservoir and two on Cabinet Gorge Reservoir provide angling on smaller bodies of water not directly connected to the reservoirs. The Frog Pond on Noxon Rapids Reservoir and Triangle Pond on Cabinet Gorge Reservoir are community fisheries

that are stocked with rainbow trout. Triangle Pond is also a popular burbot fishery when ice conditions are safe. Queens Cut on Cabinet Gorge Reservoir is a popular fishery for perch and bass that is not actively managed.

HABITAT

Tributary habitat in the Lower Clark Fork Drainage has been shaped by numerous natural and man-caused conditions. Somewhat unique to the area are sections of streams that seasonally go dry each year, caused by coarse gravel and rubble deposited in basins during the time of Glacial Lake Missoula. Intermittent stretches have partially isolated some upstream fish populations and selected for mixed or resident life histories in some streams. These conditions are not fully understood and are currently being researched.

The Thompson River has a unique habitat trait in that water temperatures cool as water flows downstream. The headwaters of the Thompson River begin at the outlet of the Thompson Chain of Lakes. Summer temperatures in these lakes are generally warm and elevate stream temperatures at their outlets. In the lower drainage, cold, pristine tributary inflows lower water temperatures. Fish Trap Creek and the West Fork Thompson River are the primary contributors of cold water.

Tributary habitat has also been shaped by land use throughout the lower Clark Fork. Timber production and grazing have been the primary land uses and have led to numerous problems including fragmentation associated with culverts and roads, sedimentation, bank destabilization, thermal impacts associated with degraded riparian areas, and channel alterations constructed to prevent flooding, or to move or confine streams. Road construction for timber hauling and residential development has impacted many riparian areas and stream channels. Mining has played a lesser role in shaping habitat; however, small scale mine claims exist throughout the drainage and many are active within floodplains. Proposed copper and silver mines near the Cabinet Mountain Wilderness areas could significantly alter habitat in the Rock Creek and Bull River drainages. Current estimates suggest mining could reduce base flows in these streams by seven percent.

The Lower Clark Fork drainage has eight watershed councils that actively manage drainage-wide water resource issues. Additionally, the Lower Clark Fork Watershed Group (LCFWG) is also active in the drainage. The LCFWG acts as an umbrella organization for the watershed councils and facilitates cooperation between them. The group is also active in identifying and conducting habitat restoration projects and educating landowners on proper stream and riparian habitat management. The focus area of this group ranges from the Idaho border upstream to Prospect Creek. Within this area the LCFWG has prepared or assisted with preparing watershed assessments in all the larger tributaries. Primary financial and staff support for the councils is supplied by Avista Utilities.

Approximately 66% of the Lower Clark Fork River has been converted from riverine to reservoir habitat by three hydroelectric facilities. All three reservoirs are run-of-the-river and experience limited drawdowns in most years. Reservoir drawdowns are limited to 10 feet in Noxon Rapids Reservoir and seven feet Cabinet Gorge Reservoir. Currently, fish passage is facilitated at Thompson Falls and Cabinet Gorge dams. Thompson Falls Dam was outfitted with a fish passage ladder that has been in operation since spring 2011. Bull trout passage at the Cabinet

Gorge Dam is facilitated by active capture techniques and upstream transport to the fish's tributary of origin based on genetic assignment. Permanent upstream fish passage facilities (trap and haul) are currently being designed for Cabinet Gorge and Noxon Rapids dams. Construction of the Cabinet Gorge fish trap will likely begin in 2014. Designs for the Noxon Rapids fish trap have been initiated with construction set to begin after the Cabinet Gorge facility is completed and tested.

Water quality in the lower Clark Fork River is impacted by mercury. Fish consumption advisories exist for many popular sport fish with large walleye and northern pike being the most restrictive. The source of the excess mercury is from both natural geology and upstream industrial activities

FISHING ACCESS

Fish, Wildlife and Parks maintains six Fishing Access Sites throughout the drainage. Three of these are found at the headwaters of the Thompson River on McGregor Lake and the Thompson Chain of Lakes. Two provide access to the Clark Fork River and the remaining site provides boat access to Noxon Reservoir near Flat Iron Ridge. In addition to FWP sites, the US Forest Service and Avista Utilities provide developed access at numerous sites throughout the drainage. An extensive road and trail network on public land throughout the drainage provides access to undeveloped sites.

There is 28 miles of the Clark Fork River between access points at Plains and Thompson Falls. There is a need to locate an access about halfway in between (near Weeksville) to accommodate half-day floats and complete river corridor access between Missoula and Thompson Falls.

There is a need to identify opportunities to improve fishing access in the Bull River drainage.

SPECIAL MANAGEMENT ISSUES

A majority of the Lower Clark Fork River is influenced by three hydroelectric dams built and operated by private utilities. Thompson Falls Dam was built in 1917 and is now operated by Pennsylvania Power and Light (PPL) Montana. PPL built a fishway that became operational in 2011 as part of FERC relicensing. Cabinet Gorge Dam was built in 1952 and Noxon Rapids Dam was built in 1958. Both dams are now operated by Avista Utilities. As part of their FERC relicensing, Avista developed the Clark Fork Settlement Agreement (CFSA) adopted in 1999 with 27 primary signatories representing 42 interest groups. The CFSA is a living, adaptive license to direct fisheries and wildlife mitigation for the facilities. The Native Salmonid Restoration Plan (NSRP) aimed at bull and westslope cutthroat trout and mountain whitefish is a major part of the CFSA. Mitigation has included habitat acquisition and restoration, access and recreational use development, and a trap and haul program for both juvenile and adult bull trout to provide connectivity to Lake Pend O'Reille. Permanent fish capture facilities are currently being designed for Noxon and Cabinet dams.

Rock Creek Mine: A major silver mine has been proposed in the Rock Creek drainage. The mine would develop adits that would run under the Cabinet Wilderness area and would include

portals in the West Fork of Rock Creek with a slurry pipeline to a tailings pond and pile near the mouth of Rock Creek. The mine is still undergoing environmental review and permitting. Issues include impacts on water availability in both Rock Creek and the Bull river drainages as well as impacts to water levels in mountain lakes above the adits. Disturbance from mine development and ore removal along with tailings and wastewater disposal is expected to impact Rock Creek and possibly the Lower Clark Fork River from Noxon Rapids Reservoir downstream.

FISHERIES MANAGEMENT DIRECTION FOR LOWER CLARK FORK RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Lower Clark Fork River - Confluence with Flathead River to Idaho Border	94 miles	Bull trout (N)	Wild	Conservation	Continue to monitor population trends. Using trap and haul program, reestablish fish connectivity. Continue yearlong closure on angling for bull trout.
		All other species	Wild	General	Continue to monitor distribution and status throughout the drainage.
Habitat needs and activities: Monitor drainage for potential habitat threats and restoration opportunities.					
Thompson Falls Reservoir	969 acres	Bull trout (N)	Wild	Conservation	Assess habitat use, survivorship and limiting factors of reservoir reared or fluvial fish. Continue to operate fishway with PPL Montana. Continue yearlong closure on angling for bull trout.
		All other species	Wild	General	Continue to monitor population trends.
McGregor Lake	1,522 acres	Lake trout	Wild	General	Manage harvest to support angling opportunity while reducing numbers to improve size and benefit other put and take fisheries.
		Rainbow trout	Hatchery	Put-Grow-Take	Provide harvest and recreational opportunity for occasional 1-3 pound rainbows. Continue to boat plant trout throughout the lake to minimize predation by lake trout.
		Kokanee salmon	Hatchery	Put-Grow-Take	Provide quality harvest and recreational opportunity for occasional salmon up to 15". Identify if continued stocking is warranted based on predatory lake trout population.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Little McGregor Lake	33 acres	Rainbow trout	Hatchery	Put-Grow-Take	Provide quality harvest and recreational opportunity for 1+ pound rainbows. Identify if stocking is warranted based on competition with stunted yellow perch population.
		Yellow perch	Wild	General	Provide for harvest of at least 8" yellow perch. Monitor population structure to determine if quality perch population can be sustained or if lake should be rehabilitated for salmonids.
Upper Thompson Lake	294 acres	Northern pike	Wild	General	Continue to provide for liberal harvest including spearing to provide for recreational opportunity and decrease predation on Put and take fisheries and yellow perch.
		Yellow perch	Wild	General	Maintain recreational angling and harvest opportunity
		Largemouth bass	Wild	General	Maintain recreational angling and harvest opportunity. Through regulation, enhance opportunity for spawning size bass (>14").
Middle Thompson Lake	557 acres	Northern pike	Wild	General	Continue to provide for liberal harvest including spearing to provide for recreational opportunity and decrease predation on put and take fisheries and yellow perch.
		Rainbow trout	Hatchery	Put-Grow-Take	Identify if continued stocking is warranted based on predator populations of northern pike and bass.
		Kokanee salmon	Hatchery/ Wild	Put-Grow-Take/ Restrictive Regulations	Maintain regulations that promote protection of naturally reproducing population with opportunity for larger kokanee Continue to monitor contribution to population of hatchery

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Yellow perch	Wild	General	versus wild kokanee. Identify if stocking is warranted based on predator populations of northern pike and bass. Maintain recreational angling and harvest opportunity
		Largemouth bass	Wild	General	Maintain recreational angling and harvest opportunity. Through regulation, enhance opportunity for spawning size bass (>14").
Habitat needs and activities: Monitor perched culvert between Middle Thompson Lake and Upper Thompson Lake for obstruction to fish movement. Identify if replacement is necessary.					
Lower Thompson Lake	240 acres	Northern pike	Wild	Wild	Continue to provide for liberal harvest including spearing to provide for recreational opportunity and decrease predation on put and take fisheries and yellow perch.
		Rainbow trout	Hatchery	Put-Grow-Take	Identify if continued stocking is warranted based on predator populations of northern pike and largemouth bass.
		Kokanee salmon	Hatchery/ Wild	Put-Grow-Take/ Restrictive Regulations	Maintain regulations that promote protection of naturally reproducing population with opportunity for larger kokanee Monitor contribution to population of hatchery versus wild kokanee. Identify if continued stocking is warranted based on predator populations of northern pike and bass.
		Yellow Perch	Wild	General	Maintain recreational angling and harvest opportunity

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Largemouth bass	Wild/ Hatchery	General/Put-Grow-Take	Maintain recreational angling and harvest opportunity. Through regulation, enhance opportunity for spawning size bass (>14”). Monitor contribution to population of hatchery versus wild bass. Identify if continued stocking is warranted
Thompson River	55 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild/ Transfer	Conservation/ Restrictive Regulations	Continue to monitor population trends. Continue yearlong closure on angling for bull trout. Continue upstream bull trout transport program for fish from below Cabinet Gorge Dam. Assess and monitor habitat conditions. Continue yearlong closure on angling for bull trout.
		Rainbow trout, Brown trout	Wild	Special Regulations	Continue to manage harvest to provide angling opportunity for larger trout with restrictive regulations and minimize impacts on native fish
		Mountain whitefish (N), Sculpin , Longnose dace (N), Brook trout	Wild	General	Provide winter fishery for mountain whitefish in lower 17 miles of river.
Habitat needs and activities: Decrease sedimentation and stream bank instability through instream and riparian habitat restoration. Investigate causes of elevated water temperatures and restore if possible.					
Little Thompson River	20.3 miles	Westslope cutthroat trout (N)	Wild	General	Continue to monitor distribution and status throughout the drainage. Continue to limit harvest.
		Brook trout	Wild	General	Maintain liberal regulations. Determine if there are impacts on native fish.
Habitat needs and activities: Identify leading causes of habitat degradation and determine if restoration would benefit bull trout.					

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Fish Trap Creek	27.5 miles	Bull Trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation/ Restrictive Regulations	Continue to monitor distribution and status throughout the drainage. Continue to limit harvest.
Habitat needs and activities: Assess habitat and hydrologic conditions. Restore habitat where necessary.					
West Fork Thompson River	8.4 miles	Bull trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation/ Restrictive Regulations	Continue to monitor distribution and status throughout the drainage. Continue to limit harvest.
Habitat needs and activities: Assess habitat and hydrologic conditions. Restore habitat where necessary.					
Prospect Creek	77.6 miles	Bull trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Continue to monitor distribution and status throughout the drainage.
		Mountain whitefish (N), Sculpin (N), Rainbow trout, Brook trout, Brown trout	Wild	General	Continue to monitor distribution and status throughout the drainage. Continue to monitor effectiveness of the Blossom Lakes brook trout removal in the upper drainage.
Habitat needs and activities: Develop a working group to identify potential habitat restoration and mitigation projects. Restore habitat degraded by land use, roads, pipelines and power lines. Continue to monitor previously conducted habitat restorations.					

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Graves Creek	19.2 Miles	Bull trout (N)	Wild/ Transport	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N), Mountain whitefish (N)	Wild	Conservation/General	Continue to monitor distribution and status throughout the drainage. Identify factors limiting native salmonids.
		Sculpin (N), Rainbow trout, Brown trout, Brook trout	Wild	General	Continue to monitor distribution and status throughout the drainage.
Habitat needs and activities: Monitor drainage for potential habitat threats and restoration opportunities.					
Vermillion River	43.2 Miles	Bull trout (N)	Wild/ Transport	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Continue to monitor distribution and status throughout the drainage.
		Mountain whitefish (N), Sculpin (N), Rainbow trout, Brown trout, Brook trout	Wild	General	Continue to monitor distribution and status throughout the drainage.
Habitat needs and activities: Continue to reduce sediment sources by stabilizing stream banks and repairing riparian habitat.					
Noxon Rapids Reservoir	7,940 Acres	Bull trout (N)	Wild	Native	Assess habitat use, survivorship and limiting factors of reservoir reared fish. Establish adult bull trout passage past Noxon Rapids Dam through a trap and haul program. Administer

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Walleye	Wild	Suppression	Montana portion of Avista fisheries mitigation program. Continue yearlong closure on angling for bull trout. Suppress illegally introduced walleye from the reservoir as possible.
		Largemouth bass, Smallmouth bass	Wild	General/ Restrictive Regulations	Maintain later spawning closure to protect spawning bass. Monitor impacts of fishing derbies and general harvest on bass > 12".
		All other species	Wild	General	Continue to monitor population trends.
Trout Creek	30.2 Miles	Bull trout	Wild	Conservation	Continue to monitor population trends. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout	Wild	Conservation	Continue to monitor distribution and status throughout the drainage.
		Longnose dace, Rainbow trout, Brown trout, Brook trout	Wild	General	Continue to monitor distribution and status throughout the drainage.
Habitat needs and activities: Monitor drainage for potential habitat threats and restoration opportunities.					
Swamp Creek	16.6 Miles	Bull trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Continue to monitor distribution and status throughout the drainage.
		Mountain whitefish (N),	Wild	General	Continue to monitor distribution and status

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

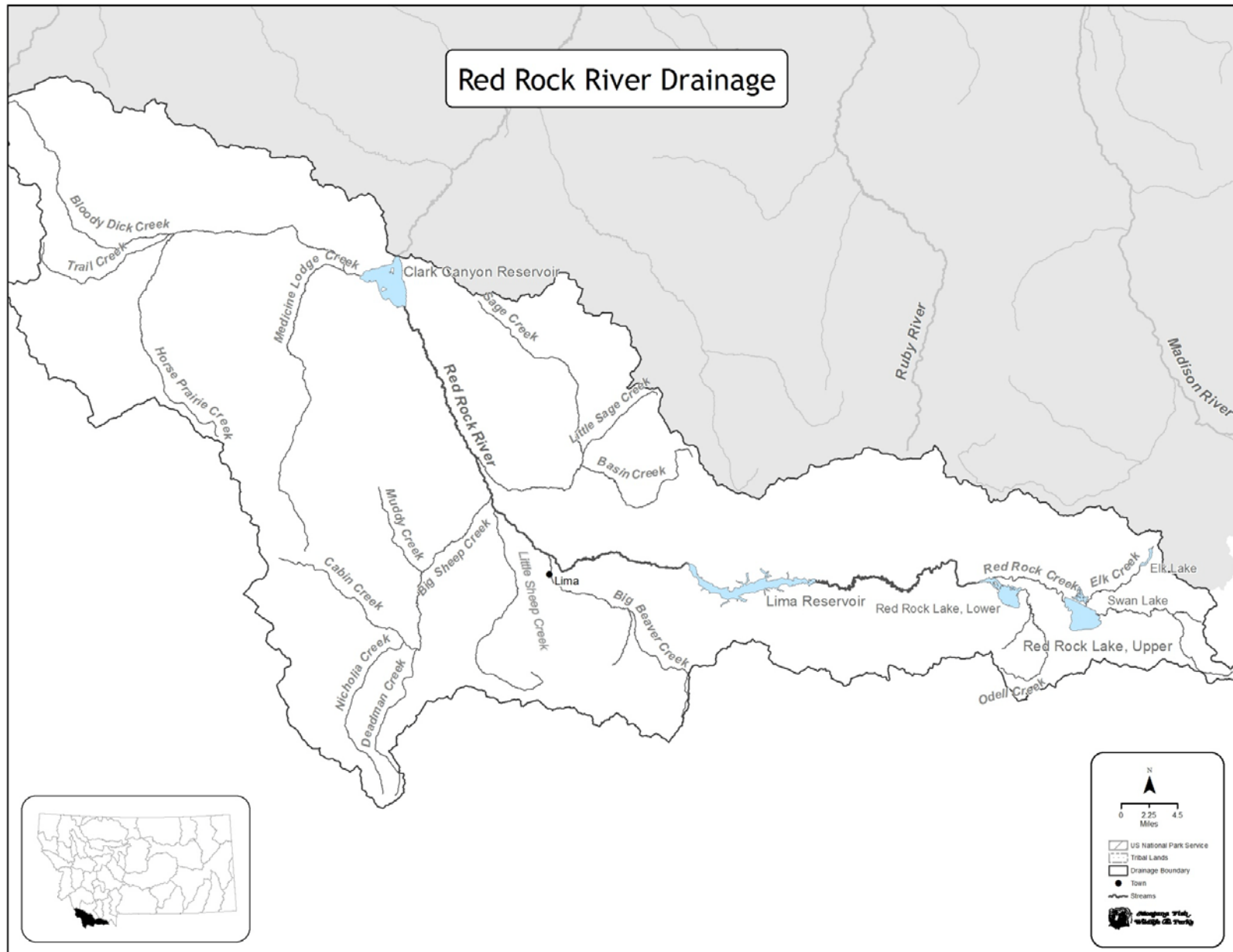
Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Largescale sucker (N), Sculpin (N), Rainbow trout, Brown trout, Brook trout			throughout the drainage.
Habitat needs and activities: Monitor drainage for potential habitat threats. Restore degraded habitat identified in the USFS watershed assessment.					
Rock Creek	17 Miles	Bull trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Continue to monitor distribution and status throughout the drainage. Work with partners to minimize effects of reduced base flows and habitat impacts associated with proposed mines in the headwaters.
		Rainbow trout, Brown trout, Brook trout	Wild	General	Continue to monitor distribution and status throughout the drainage. Work with partners to minimize effects of reduced base flows and habitat impacts associated with proposed mines in the headwaters.
Habitat needs and activities: Monitor drainage for potential habitat threats and restoration opportunities with potential mine development.					
Cabinet Gorge Reservoir	3,200 Acres	Bull trout (N)	Wild	Conservation	Assess habitat use, survivorship and limiting factors of reservoir reared fish. Establish adult bull trout passage past Cabinet Gorge Dam through a trap and haul program. Administer Montana portion of Avista fisheries mitigation program. Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Work with Idaho Fish and Game Department to

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
					assess potential for passage of westslope cutthroat from Lake Pend O’Reille to upstream of Cabinet Gorge Dam.
		All other species	Wild	General	Continue to monitor population trends.
Bull River	71.6 miles	Bull trout (N)	Wild/ Transfer	Conservation	Continue to monitor population trends. Continue downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout.
		All other species	Wild	General	Continue to monitor distribution and status throughout the drainage. Continue to exclude introduced salmonids (rainbow, brown, brook trout) from the East Fork Bull River.
Habitat needs and activities: Continue to restore degraded habitat identified in the Bull River Watershed Assessment. Monitor potential mine impacts. Assess potential to improve recreational access.					
Mountain Lakes	1,112 acres total	Westslope cutthroat trout (N)	Wild/ Hatchery	Put-Grow-Take/ General	Survey mountain lakes to determine distribution and status of wild populations. Stock at a basic rate of 100 westslope cutthroat fingerlings every 3 years. Adjust density and frequency of plants based on the extent of natural reproduction and fishing pressure to provide a recreational fishery with a variety of fish sizes and catch rates.
		Brook Trout	Wild	General	Survey mountain lakes to determine distribution and status of wild populations, Identify populations that can be managed or where removal may be necessary if impacts to native fish.
Clark Fork Tributary Streams	1,214 miles	All	Wild	General	Survey previously un-sampled creeks to determine the distribution and status of the fish. Monitor previously surveyed populations.

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
(McLaughlin, Henry, Combest, Boyer, Lynch, Weeksville, Swamp (east), Eddy, Munson, Quartz, Malone, Outlaw, Cherry, Squaylth-Kwum, Mosquito, Deep, Beaver, Tuscor, Martin, Stevens, McKay, Pilgrim, Blue, Elk)					Determine connection to and contribution to Clark Fork River fisheries.
Habitat needs and activities: Protect sections of high quality habitat where necessary and restore habitat when beneficial to native species.					



RED ROCK RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Red Rock River originates in the Centennial Valley and flows west through Upper and Lower Red Rock Lakes and then to Lima Reservoir. Lima Reservoir is a 6,800 acre irrigation storage facility built in 1902. From Lima Dam, the river flows an addition 57.4 miles in a northwesterly direction through agricultural and grazing lands before discharging into Clark Canyon Reservoir. Clark Canyon Reservoir is a 4,900 acre irrigation impoundment that was built in 1964. Prior to construction of Clark Canyon Reservoir, the Red Rock River and Horse Prairie Creek converged to form the Beaverhead River. Major tributaries of the Red Rock River include Big Sheep Creek and Horse Prairie Creek. The Red Rock River drains an area of 1,580 square miles, about half of which lies on the mountain slopes of the Continental Divide.

The Centennial Valley occurs primarily at over 6,000 ft of elevation and remains one of the least inhabited large high valleys in the state of Montana. The Centennial Mountains rise abruptly, about 3,000 ft above the valley floor to form the Continental Divide and the valley's southern boundary. The northern boundary is formed by the gently rounded sagebrush covered hills of the Gravelly Range. The Valley is about 50 miles long and 7 miles wide and is drained by the Red Rock River which flows into Lima Reservoir to the west. Elevation at the headwaters of Red Rock Creek is approximately 8,100 feet and constitutes the upstream most headwaters of the Missouri River. The Red Rock leaves the valley at about 6,450 feet in elevation.

There are 23 lakes or reservoirs within the drainage, totaling 14,939 surface acres. Clark Canyon is the largest reservoir in the drainage at 4815 acres. Two large shallow lakes, Upper (2,206 acres) and Lower (1,126 acres) Red Rock lakes, dominate the valley floor in the Centennial Valley. Both lakes have uniform, shallow (< 6 ft) basins with aquatic vegetation throughout bottoms of mud, peat, and detritus. Elk Lake, which is 207 acres and about 60 feet deep, occurs in the northeast corner of the valley at 6,750 feet in elevation. Several other small lakes and reservoirs occur throughout the mountain ranges bounding the valley. Four major streams, Red Rock, Elk, Tom, and O'dell creek occur upstream of the Red Rock Lakes. The Red Rock River begins as the outlet of Lower Red Rock Lake. In addition, many small mountain and spring fed streams occur throughout the Centennial Valley.

The Centennial Valley hosts the longest winters in the nation, excluding Alaska. Snowfall averages over 138 inches annually and frost can occur in every month of the year. Annual precipitation averages around 19 inches. The timbered slopes and rocky basins of the area capture the heavy winter snows and provide a constant supply of water for the 14,000 acres of lakes, marshes, and streams within the valley.

FISHERIES MANAGEMENT

Fish communities in the Red Rock River basin downstream from Lima Reservoir are common to Southwestern Montana. These species include: rainbow trout, brown trout, brook trout, hybrid westslope cutthroat trout, westslope cutthroat trout (primarily in isolated tributaries), mountain

whitefish, common carp, longnose dace, longnose sucker, Rocky Mountain sculpin, and white sucker.

Native fish species that occur in the Centennial Valley include Arctic grayling, lake trout, westslope cutthroat trout, burbot, mountain whitefish, white sucker, longnose sucker, longnose dace, and sculpin. Nonnative species include brook trout, Yellowstone cutthroat trout, rainbow trout, and Utah chub.

Fisheries in the Centennial Valley are managed primarily for conservation and recreational angling of native species. Where nonnative species occur, they are managed as recreational fisheries. The Red Rocks National Wildlife Refuge, which was established in 1935 for trumpeter swan conservation, occupies over 39,000 acres in the eastern part of the valley. Stream and lakes that occur there are co-managed with the Refuge to ensure that their fisheries and wildlife goals and mandates are met. The remainder of the valley is private, BLM, and DNRC lands, much of which is managed primarily for cattle grazing.

Fish stocking in the Red Rock River basin occurred between the 1930s and 1970s when wild trout management philosophies were instituted. Typical species stocked included cutthroat trout, rainbow trout, and brown trout. Upstream from Lima Reservoir, documentation of historical stocking is limited, showing only one stocking of rainbow trout in 1959. Yellowstone cutthroat trout were also stocked into the Red Rock River drainage upstream from Lima reservoir; however, official records are limited to stocking that occurred once in 1936 of undesignated cutthroat trout. Like many waters in Montana, complete stocking records do not exist, and stocking likely occurred frequently prior to the 1930s.

In recent years, Arctic grayling have been stocked in the Upper Red Rock River basin in support of conservation actions (including Elk Lake). Since the 1930s, Elk Lake has been stocked with rainbow trout, Yellowstone Cutthroat Trout, and most recently westslope cutthroat trout. Due to limited natural reproduction potential in Elk Lake, rainbow trout and Yellowstone cutthroat trout are likely not present at the current time.

Fishing regulations throughout the Red Rock River basin follow Central District Standard regulations with a few exceptions. In Big Sheep and Red Rock creeks, and several other smaller tributaries, cutthroat trout are included in the Combined Trout limit. Cutthroat trout are managed with catch-and-release only regulations in the remainder of the drainage. In the Red Rock River downstream from Lima Reservoir, harvest rates are reduced for Combined Trout (3 daily and in possession, only 1 over 18 inches). Arctic grayling are protected by catch-and-release regulations throughout the basin, and lake trout are protected by catch-and-release regulations in Elk Lake.

The combined trout harvest limit in Clark Canyon Reservoir is three daily and in possession. Burbot harvest regulations are also exceptions to the Central District Standard regulation allowing only three burbot daily and in possession and only 1 over 28 inches. Both of these regulations are directed at maintaining high size structure to the trout and burbot populations within the reservoir.

Angling is currently not allowed in either Upper or Lower Red Rock Lakes. Otherwise, with the exception of Clark Canyon Reservoir, angler use of waters within the Red Rock River basin is low. Elk Lake has the highest angler use relative to the size of the water (207 acres), with effort

approaching 2,000 angler days in 2009. Over the past decade, angling pressure on Clark Canyon Reservoir has varied from 14,452 angler days in 2003 to 37,709 angler days in 2009. Total use by non-resident anglers has varied from 7 to 42 percent of all angler days over the last decade.

Twenty three mountain lakes exist within the Red Rock River drainage that are managed as trout fisheries. Management of these lakes varies from periodic hatchery stocking to wild self-sustaining fisheries.

HABITAT

The Red Rock River upstream from Lima Reservoir is a low gradient stream, flowing for 29.3 miles through open sagebrush country within the Centennial Valley. In the Centennial Valley, the river has a sand-gravel bottom that is covered in vast areas with accumulations of silt. The narrow riparian zone is vegetated with sedges, grasses and clumps of willow. Over half of this reach passes through parcels of public land controlled by the BLM, State of Montana, and FWS. The summer grazing of livestock is the major land use along this stretch of the Red Rock River.

Between Lima Dam and Clark Canyon Reservoir, the Red Rock River flows for 57.4 miles through privately owned valley lands, primarily used for hay production and the wintering of cattle. The river width averages about 45 feet at low flow, and the substrate is comprised of gravel-cobble with some silt deposition in the slower moving waters. The narrow riparian zone is primarily vegetated with grasses, willows, alders and cottonwoods. Approximately 35,000 acres of land is irrigated within this reach of river. Stream dewatering can be severe in this reach of the Red Rock River, with flow ceasing for several days at a time within short stretches of river. Wintering cattle have damaged the stream banks along portions of the reach, creating raw and eroding banks.

A USGS gage was operated from 1936 through 1967 at river mile 10.4. The mean annual flow for the six complete years of record (1937-1942) was 93.6 cfs. For the remaining period of operation, only non-winter flows were recorded. Non-winter monthly mean flows varied from 47.1 cfs in September to 408 cfs in May. Water to irrigate about 6,000 acres is diverted upstream from this historic gage.

FISHING ACCESS

No FWP Fishing Access Sites exist within the Red Rock River Basin, but public lands generally provide adequate access to waters within the basin.

SPECIAL MANAGEMENT ISSUES

In 2007, Montana Fish, Wildlife & Parks, and partners (BLM, USFWS, USFS, Montana Council Trout Unlimited, Montana Chapter American Fisheries Society, Yellowstone National Park, Montana Arctic Grayling Recovery Program, NRCS, and DNRC) all cosigned a Memorandum of Understanding (MOU) concerning Montana Arctic Grayling Conservation. This MOU defines responsibilities and procedures agreed to by all signatory agencies conserving conservation actions to benefit Arctic grayling in Montana.

The Red Rock River drainage is also home to several conservation populations of westslope cutthroat trout providing opportunities to conserve this native species in the drainage. The long-

term goal of cutthroat conservation in the Red Rock is to have approximately 20% of the historically occupied habitat restored to secure conservation populations of cutthroat trout (see Part 1: Trout: Westslope and Yellowstone Cutthroat Trout for details).

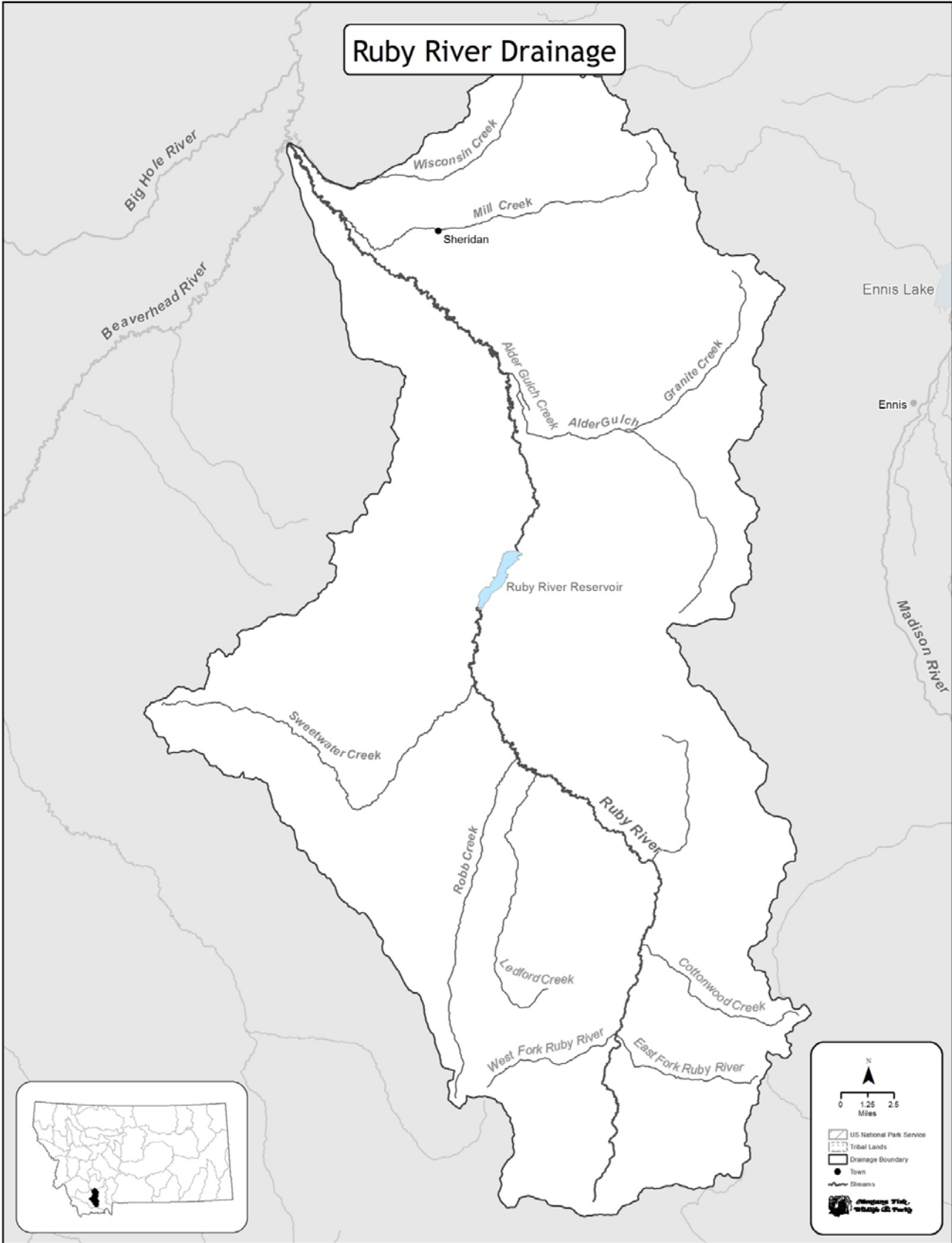
PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR RED ROCK RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Elk Lake	207 acres	Lake trout (N)	Wild	Conservation	Continue native species conservation to maintain a viable, self-sustaining population
		Burbot (N)	Wild	General	Continue to manage fish density through angler harvest to maintain fish growth
		Arctic grayling (N)	Wild/ Hatchery	Conservation	Continue native species conservation to maintain or create a viable, genetically unaltered, self-sustaining population and, secondarily, to provide angling opportunity. Augment population as necessary to maintain viability and genetic diversity.
		Westslope cutthroat trout (N)	Wild/ Hatchery	General	Continue to manage stocking and harvest to maintain fish growth. Augment population as necessary to maintain viability and genetic diversity.
Habitat needs and activities: Restore and maintain suitable spawning tributary habitats.					
Red Rock Creek	26 miles	Arctic grayling (N)	Wild	Conservation	Continue native species conservation to maintain viable, genetically unaltered, self-sustaining populations
		Yellowstone cutthroat trout, Brook trout	Wild	Liberal Regulations/ General	Continue to manage to minimize potential impact on viability of Arctic grayling and secondarily for recreational angling
Habitat needs and activities: Reduce delivery of fine sediment, maximize instream flows and riparian habitat quality, and ensure that adequate spawning and overwintering habitats exist.					
Centennial Valley Streams		Arctic grayling (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue native species conservation to maintain or create viable, genetically unaltered, self-sustaining populations

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Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Hybridized cutthroat trout, Rainbow trout, Brown trout, Brook trout, Mountain whitefish	Wild	General	Continue to manage fish density through angler harvest to maintain fish growth and, in some instances, to ensure they are not limiting the viability of westslope cutthroat trout populations.
Habitat needs and activities: Survey all tributary streams to determine present habitat quality, stressors and limiting factors, and restoration potential and options. Secure and replicate extant genetically unaltered westslope cutthroat trout populations and create meta-populations of westslope cutthroat trout in accordance with existing conservation plans. Initiate localized and watershed-scale restoration projects to address stressors and limiting factors. Develop instream flow improvements and plans in areas of need.					
Red Rock River	79 miles	Brown trout, Rainbow trout, Mountain whitefish (N)	Wild	General	Maintain present numbers and sizes.
Lima Reservoir	4,422 acres	Hybridized cutthroat trout, Burbot (N)	Wild	General	Maintain present numbers and sizes
		Arctic grayling (N)	Wild	Conservation	Continue native species conservation to maintain viable, genetically unaltered, self-sustaining populations
Clark Canyon Reservoir	4,815 acres	Rainbow trout	Hatchery	Put and Take/ Quality	Continue to manage stocking and harvest to support quality angling opportunity for larger fish
		Brown trout	Wild	General	Consider increasing angler harvest to reduce numbers if necessary to maintain fish growth
		Burbot (N)	Wild	Restrictive Regulations	Maintain present numbers and sizes.
Habitat needs and activities: Develop and implement a reservoir management plan that, in conjunction with flow management in the Beaverhead River, optimizes fisheries benefits and irrigation needs. Model relationships between fish planting success and reservoir volume, stock date and method, stocking strain, other fish abundance etc. to develop the most effective stocking strategies.					
Mountain Lakes	23 lakes and 148 acres	Westslope cutthroat trout, Hybridized cutthroat trout, Yellowstone cutthroat trout, Rainbow trout, Brook trout,	Wild/ Hatchery	Put and Take/ General	Continue to manage stocking and harvest to maintain fish growth



RUBY RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Ruby River arises from tributaries (its East, West and Middle Forks) located in the Gravelly and Snowcrest mountains of Southwest Montana, and flows in a northwesterly direction for 41 miles through a narrow valley to Ruby Reservoir. Ruby Reservoir, built in 1939, is used for the storage of irrigation water. Downstream from Ruby Dam, the river meanders for approximately 48 miles through an agricultural valley to its confluence with the Beaverhead River. The river drains an area of approximately 935 square miles.

FISHERIES MANAGEMENT

The Ruby River basin contains fish species common to Southwestern Montana. These species include: rainbow trout, brown trout, brook trout, hybrid westslope cutthroat trout, westslope cutthroat trout (primarily in isolated tributaries), mountain whitefish, Arctic grayling, common carp, longnose dace, longnose sucker, Rocky Mountain sculpin, and white sucker. Arctic grayling are historically native to the drainage, but were extirpated. Beginning in the early 2000s, Arctic grayling were restored to the headwater reaches of the Ruby River basin. As of 2011, three years of natural reproduction had been documented, indicating that the population is self-sustaining.

Although the Ruby River basin was historically stocked with hatchery fish, stocking in the rivers and streams was discontinued by the early 1970s, and wild trout management philosophies were initiated. Ruby River Reservoir has been stocked since 1940, primarily with rainbow trout. Yellowstone cutthroat trout were stocked in 1980 through 1983. During most years since 1940, annual stocking of rainbow trout has occurred.

The Ruby River is managed under the Central District Standard regulations for the entire river. Angling is allowed from 1 December through the third Saturday in May for whitefish and catch-and-release for trout using artificial lures and/or maggots only. Upstream from Ruby Reservoir in the mainstem Ruby River, harvest of cutthroat trout is allowed as part of the combined trout limit, as most cutthroat trout within this section are hybridized with rainbow trout. Ruby Reservoir is managed under Central District Standard regulations with no exceptions.

The majority of river angling on the Ruby River occurs downstream from Ruby Dam. Since 2001, total angler effort on the Ruby River from the mouth to Ruby Dam has exceeded 9,000 angler days (over 14,000 in 2007 and 2009). Angler effort upstream of Ruby Dam is approximately 10% of the levels observed downstream from the dam. The number of angler days per year for Ruby Reservoir has varied between 5,600 and 12,397 between 2001 and 2009.

Conservation populations of westslope cutthroat trout exist in some Ruby River tributaries, and are managed as catch-and-release fisheries. Arctic grayling in the Ruby River are also protected from harvest with catch-and-release regulations.

Nine mountain lakes exist within the Ruby River basin that are managed as trout fisheries. Management of these lakes varies from periodic hatchery stocking to wild self-sustaining fisheries.

HABITAT

The upper Ruby River valley has a broad floodplain bounded on the west by the steep, mountainous Snowcrest Range and on the east by the gentler, rolling Gravelly Range. Elevations in the upper valley range from 5,900 to 10,500 feet. Lands within the 538 square mile upper drainage are primarily controlled by the USFS and the BLM. Average gradient of the 50-foot wide river channel is fairly constant at 7 feet/1,000 feet.

The upper drainage is comprised of 61% grassland, 12% forest, and 13% subalpine grassland, 12% noncommercial timber and 2% wet meadow and willow bottom. Riparian plant species are primarily willow, alder, birch and grasses and sedges.

The soils of the upper Ruby River valley are highly susceptible to erosion and mass wasting. The overgrazing of these areas in the late 1800s resulted in the formation of extensive rills and gullies. A riparian zone survey conducted in 1976 identified 621 sites with bank instability on the upper 14 miles of river. Livestock and livestock activities were the apparent cause at 46% of these sites.

The deposition of extremely fine sediments in the main river as well as the major tributaries in the upper drainage is a serious problem potentially affecting trout food production and trout eggs. Due to severe sediment deposition, the intergravel water permeability in most trout spawning areas is below the level needed for good survival of trout eggs.

Downstream from Ruby River Reservoir, the Ruby River meanders for 47.9 miles through private grazing and irrigated hay lands within the wide, open Ruby Valley. Channel and bank alterations are common within this stretch. As of 1973, a total of 280 river bank and 53 channel alterations were documented. These projects comprised 17 and 8 percent of the reach length, respectively.

A major habitat concern in the lower Ruby River is excessive sedimentation. Overgrazing of the upper drainage, coupled with the fragile soil types of the area have resulted in erosion problems and the accumulations of vast sediment deposits in Ruby Reservoir. During periods of extreme drawdown, the discharge from Ruby Reservoir is excessively turbid. This is attributed to bottom sediments being drawn into suspension by currents generated on the reservoir floor. The destruction of stream bank vegetation by livestock has further aggravated the sediment problem downstream from Ruby Reservoir.

Dewatering of the Ruby River downstream from Ruby Reservoir is a serious habitat issue. When water is stored in Ruby Reservoir during the winter months, flows downstream from the dam are greatly reduced. Portions of the river are also subject to severe dewatering during the summer irrigation season. During the droughts of 1985 and 1987, stretches of the Ruby River downstream from the reservoir were totally dewatered, causing major fish kills.

FISHING ACCESS

Five fishing access sites are located on the Ruby River. These sites are located from the Ruby Dam downstream.

SPECIAL MANAGEMENT ISSUES

In 2007, Montana Fish, Wildlife & Parks and partners (the BLM, USFWS, USFS, Montana Council Trout Unlimited, Montana Chapter American Fisheries Society, Yellowstone National Park, Montana Arctic Grayling Recovery Program, NRCS, and DNRC) all cosigned a Memorandum of Understanding (MOU) concerning Montana Arctic Grayling Conservation. This MOU defines responsibilities and procedures agreed to by all signatory agencies conserving conservation actions to benefit Arctic grayling in Montana (including the Ruby River).

The Ruby River drainage is also home to several conservation populations of westslope cutthroat trout providing opportunities to conserve this native species in the drainage. The long-term goal of cutthroat conservation in the Ruby is to have approximately 20% of the historically occupied habitat restored to secure conservation populations of cutthroat trout (see Part 1: Trout: Westslope and Yellowstone Cutthroat Trout for details).

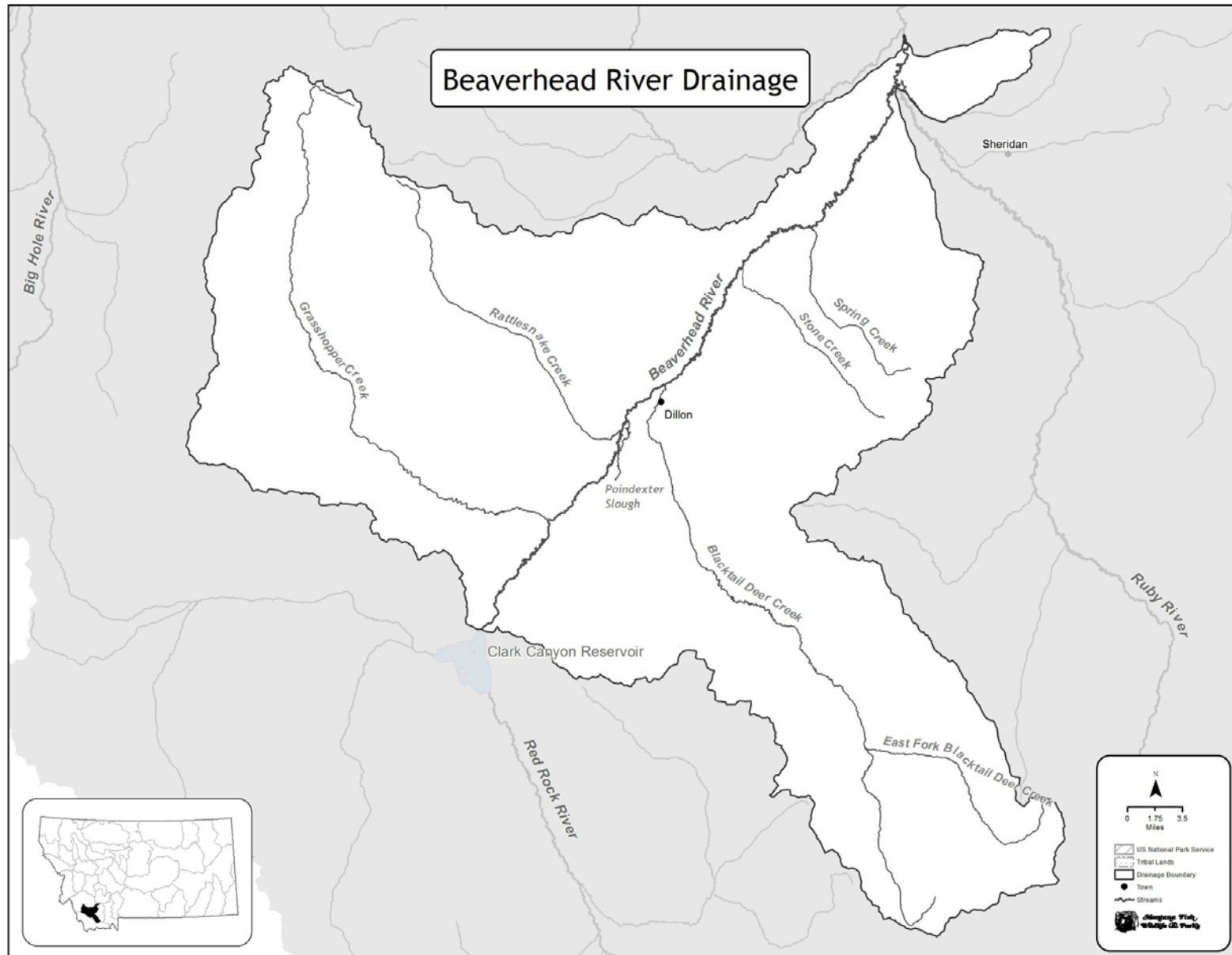
PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR RUBY RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Ruby River Upstream of Ruby Reservoir	48.2 miles	Arctic grayling (N)	Wild	Conservation	Continue native species conservation to maintain viable, self-sustaining populations
		Hybridized cutthroat trout, Rainbow trout, Brown trout, Brook trout, Mountain whitefish (N)	Wild	General	Maintain present numbers and sizes. Consider increasing harvest to reduce numbers if necessary to maintain fish growth.
Ruby Reservoir	943 acres	Rainbow trout	Hatchery	Put, Grow and Take	Continue to manage stocking and harvest to minimize density dependant reductions in fish growth
		Brown trout	Wild	General	Maintain present numbers and sizes. Consider increasing harvest to reduce numbers if necessary to maintain fish growth.
Habitat needs and activities: Maintain reservoir elevations in accordance with existing management plan. Model relationships between fish planting success and reservoir spilling duration, volume, etc. to develop the most effective stocking strategies.					
Ruby River Downstream of Ruby Reservoir	45.5 miles	Rainbow trout, Brown trout, Mountain whitefish (N)	Wild	General	Maintain present numbers and sizes. Consider increasing harvest to reduce numbers if necessary to maintain fish growth.
Habitat needs and activities: Maintain instream flow in accordance with existing flow management plans. Determine whether changes in reservoir management will improve the quality of the downstream fishery. Initiate localized and watershed-scale restoration projects to achieve TMDL compliance on 303d listed streams.					
Ruby River Tributaries	342 miles	Westslope cutthroat trout (N)	Wild	Conservation	Continue native species conservation to maintain or create viable, genetically unaltered, self-sustaining populations
		Hybridized cutthroat trout, Rainbow trout, Brown trout, Brook trout, Mountain whitefish (N)	Wild	General	Maintain present numbers and sizes. Consider increasing harvest to reduce numbers if necessary to maintain fish growth and in some instances, to ensure they are not limiting the

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
					viability of westslope cutthroat trout populations.
Habitat needs and activities: Secure and replicate extant genetically unaltered westslope cutthroat trout populations and create meta-populations of westslope cutthroat trout in accordance with existing conservation plans. Initiate localized and watershed-scale restoration projects to achieve TMDL compliance on 303d listed streams . Develop instream flow improvements and plans in areas of need.					
Mountain Lakes	9 lakes and 65 acres	Westslope cutthroat trout, Hybridized cutthroat trout, Yellowstone cutthroat trout, Rainbow trout, Brook trout,	Wild/ Hatchery	Put and Take/ Wild	Maintain present numbers and sizes. Consider increasing harvest to reduce numbers if necessary to maintain fish growth.



BEAVERHEAD RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Beaverhead River originates at the outlet of Clark Canyon Reservoir, an irrigation storage facility constructed by the BOR in 1964, and flows 79.5 miles before joining the Big Hole River to form the Jefferson River. Directly downstream from Clark Canyon Dam, the river flows through a canyon for 16 miles, before entering the broad, open Beaverhead Valley. At Point of Rocks, the river passes through a narrow constriction, then continues for about 20 miles through a wide, gently sloping valley to its confluence with the Big Hole River. The river drains an area of approximately 5,000 square miles. A large portion of the drainage consists of rugged mountains ranging from 9,000 to 11,000 feet in elevation. The river elevation at the dam outlet is 5,450 ft, and at the mouth is 4,600 ft. Major tributaries entering the river in downstream progression are: Grasshopper, Rattlesnake and Blacktail Deer creeks, and the Ruby River.

FISHERIES MANAGEMENT

The Beaverhead River basin contains fish species common to Southwestern Montana. These species include: rainbow trout, brown trout, brook trout, hybrid westslope cutthroat trout, westslope cutthroat trout (primarily in isolated tributaries), mountain whitefish, burbot, common carp, longnose dace, longnose sucker, Rocky Mountain sculpin, and white sucker.

Although the Beaverhead River basin was historically stocked with hatchery fish, stocking in the rivers and streams was discontinued by the early 1970s, and wild trout management philosophies were initiated. Between the 1930s and 1960s, the Beaverhead River was stocked with rainbow trout, cutthroat trout (undesignated as to which sub-species), and brown trout. Arctic grayling have also been stocked into the Ruby River basin during the late 1990s and the early 2000s as part of a FWP restoration program. The stocking was discontinued in 2002, and no natural reproduction has been subsequently detected through annual sampling. Rainbow trout have been stocked annually into Clark Canyon Reservoir since 1964.

The Beaverhead River is managed under Central District Standard regulations for the entire river with a few exceptions. Only one rainbow trout may be counted in the combined trout limit, and angling is closed from Clark Canyon Dam to Pipe Organ Bridge from 1 December until the third Saturday in May.

Angling pressure is high on the Beaverhead River downstream from Clark Canyon Dam. Angling effort has varied from 14,574 angler days in 2001 to 38,706 angler days in 2009. On average, over half of the angler days logged on the Beaverhead River are from non-resident anglers.

Twelve mountain lakes exist within the Beaverhead River basin that are managed as trout fisheries. Management of these lakes varies from periodic hatchery stocking to wild self-sustaining fisheries.

HABITAT

Throughout much of the Beaverhead River's length, it is confined to a single channel. Mean channel widths range from about 83 feet near the dam to about 93 feet near the mouth. The gradient is gentle, averaging 12 feet per mile. Willow is the dominant bank vegetation. In the upper river, the streambed consists primarily of rubble, gravel and sand. In addition to the above, silt is a common component of the streambed in the lower river. Fish cover primarily consists of submerged and overhanging bank vegetation, undercut banks, and long, deep pools.

Clark Canyon Reservoir and irrigation diversions affect the flow pattern of the Beaverhead River. Prior to the construction of the reservoir, much of the lower river was severely dewatered during the summer irrigation season. In general, reservoir management has resulted in higher flows in the lower river during the historically low flow months of May, July, August and September. However, much of the lower 64 miles still suffer from dewatering. In recent years, sections of the lower river have been totally dry. Massive withdrawals of irrigation water have virtually eliminated high water flows in the lower river. During periods of drought, the upper river is now severely affected by low flow releases during the non-irrigation season when water is being stored for the following year.

FISHING ACCESS

The Beaverhead River primarily flows through private lands. Access to the river is readily obtained through some private lands, publicly owned access sites, and at bridge crossings. Floating is popular during the fishing and waterfowl seasons.

Seven FASs exist on the Beaverhead River between Clark Canyon Dam and Dillon, Montana. Opportunities for developing additional Fishing Access Sites downstream of Dillon are a high priority.

SPECIAL MANAGEMENT ISSUES

Montana Fish, Wildlife & Parks works closely with the BOR on operations of Clark Canyon Dam, in particular concerning the need for greater overwinter flows downstream of the dam.

Given the popularity of the Beaverhead River, angling is managed with social rules (regulations) to minimize social crowding issues. These rules prohibit angling by non-resident anglers and outfitters during particular times of the year and in specific sections.

The Beaverhead River drainage is home to several conservation populations of westslope cutthroat trout providing opportunities to conserve this native species in the drainage. The long-term goal of cutthroat conservation in the Beaverhead is to have approximately 20% of the historically occupied habitat restored to secure conservation populations of cutthroat trout (see Part 1: Trout: Westslope and Yellowstone Cutthroat Trout for details).

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

FISHERIES MANAGEMENT DIRECTION FOR THE BEAVERHEAD DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Beaverhead River	75 miles	Brown trout, Rainbow trout	Wild	Quality	Maintain present numbers and sizes. Consider increasing angler harvest to reduce numbers if necessary to maintain fish growth
		Mountain whitefish (N)	Wild	General	Continue to manage harvest to support viable populations
Habitat needs and activities: Develop an instream flow management plan that optimizes fisheries benefits and irrigation needs to secure 1) improved winter flows upstream of Barretts Diversion and 2) improved summer flows downstream of Barretts Diversion. Develop a sediment transport model to determine the magnitude and duration of flows required to convey fine sediment through the reach between Clark Canyon Dam and Barretts Diversion. Develop and implement an alternative to reduce or eliminate the effects of sediment delivery from the North Fork of Clark Canyon Creek.					
Beaverhead River Drainage Tributaries	491 miles	Westslope cutthroat trout (N)	Wild	Conservation	Continue native species conservation to maintain or create viable, genetically unaltered, self-sustaining populations
		Hybridized cutthroat trout, Rainbow trout, Brown trout, Brook trout, Mountain whitefish	Wild	General	Maintain present numbers and sizes. Consider increasing angler harvest to reduce numbers if necessary to maintain fish growth. Modify as necessary to ensure they are not limiting the viability of westslope cutthroat trout populations
Habitat needs and activities: Secure and replicate extant genetically unaltered westslope cutthroat trout populations and create meta-populations of westslope cutthroat trout in accordance with existing conservation plans. Initiate localized and watershed-scale restoration projects to achieve TMDL compliance on 303d listed streams. Develop instream flow improvements and plans in areas of need.					
Poindexter Slough	6 miles	Brown trout, Rainbow trout, Mountain whitefish (N)	Wild	General	Maintain present numbers and sizes. Consider increasing angler harvest to reduce numbers if necessary to maintain fish growth

PROPOSED FINAL STATEWIDE FISHERIES MANAGEMENT PLAN

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Habitat needs and activities: Reconfigure upstream headgate to the Beaverhead River to allow adequate flow to support 1) fisheries and irrigation needs and 2) periodic flushing flows to mobilize fine sediment through the system to maintain high quality habitat. Implement active channel restoration techniques to size channel appropriate to contemporary flow volumes to create self-maintaining high quality habitat. Develop a flow management plan that optimizes fisheries benefits and irrigation needs to 1) maintain minimum instream flows during summer, 2) formalize use of periodic flushing flows to mobilize convey fine sediment through the system and, 3) maximize reliance on accreted flows to enhance the spring creek character of Poindexter Slough to the extent possible.					
Mountain Lakes	12 lakes 135 acres	Westslope cutthroat trout, Hybridized cutthroat trout, Yellowstone cutthroat trout, Rainbow trout, Brook trout,	Wild/ Hatchery	Put and Take/ General	Continue to manage stocking and harvest to maintain fish sizes and numbers

